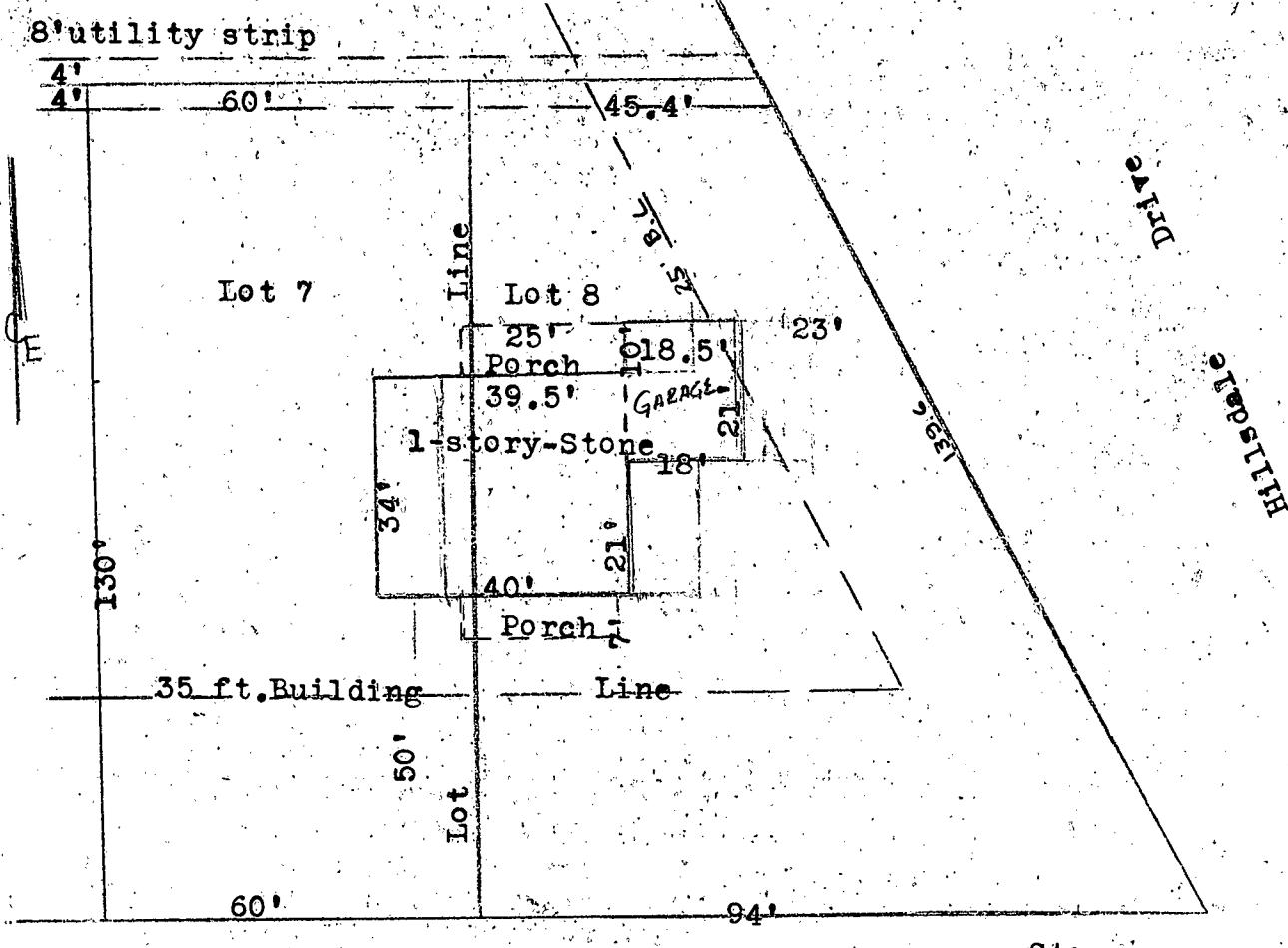


Misc. RECORDS

Copy



August 5, 1948

I, the undersigned, a licensed civil engineer, in the State of Indiana, hereby certify, that I have and on the date given above, made a field survey of the real estate shown by the plat above. I further certify that the above plat is a true and correct representation of lots 7 and 8 in Hillsdale Addition to the City of Bloomington, Indiana, as shown on the Monroe County Plat Book number 3, in the County Recorder's Office at Bloomington, Indiana. I further certify that the improvements now situated on said real estate are as shown on the above plat.

April 1, 1948

This is to certify that measurements of the lands described as follows:

A part of the Northwest Quarter of Section Thirty-two (32), Township Number Nine (9) North, Range One (1) West, described as follows: Commencing at a point on the north line of Eleventh Street in the City of Bloomington, Indiana, extended west, One Hundred Twenty-seven and seven One-Hundred Thirty seconds ($127 \frac{7}{132}$) rods south and Eleven Hundred and ninety five (1195) feet west of the North Half mile post of said section number thirty-two (32); the same being the southwest corner of McClelland Mink's Property; thence North Two Hundred Twenty (22) feet; thence west One Hundred Thirty-eight (138) feet; thence south Two Hundred Twenty (220) feet to Eleventh Street in said City; thence east One Hundred thirty-eight (138) feet to the place of beginning.

reveal that the southeast corner of said real estate is on the north line of West 11th Street (not in the city of Bloomington, Indiana) and at a point that is 1195 feet west of the half ($\frac{1}{2}$) section line of said Section 32; all as described in said Caption.

I further certify that the southwest corner of the Minks' property as given by the following description:

Part of the Northwest Quarter of Section 32, Township 9 North, Range 1 West, bounded and described as follows, to-wit: Beginning at a point on the north line of Eleventh Street 60 feet west of the southwest corner of Lot Number 73 in J. N. Alexander's Addition, thence running west 12 rods; thence north 13 rods; five feet six inches; thence east 12 rods; thence south 13 rods 5 feet 6 inches to the place of beginning. Containing 1 acre, more or less.

is also on the north line of West 11th Street (not in the City of Bloomington, Indiana) and at a point that is 1195 feet west of the half ($\frac{1}{2}$) section line of said Section 32; and that the southwest corner of the Mink's property corresponds in measurements with the southeast corner as set out in the real estate description above, and that the two points are one and the same.

I further certify that the plat of the J. N. Alexander Addition shown on Plat Book 1, page 24, shows that Waldron Avenue (now Monroe Street) is 48 feet in width; and no width is given for Summitt Street and Alexander Streets, but the plat of Millen Addition in Plat Book 2, page 66, shows Summitt Street and Alexander Street to be 60 feet in width. And the plat of Northwestern Heights Addition in Plat Book 2, page 108 shows Waldron Avenue (now Monroe Street) to be 60 feet in width.

I further certify that a field check reveals that the existing widths of the above mentioned streets to be 60 feet.

John T. Sylhetare C.E.

*Survey
April 2, 1948
JTS*

SURVEYOR'S REPORT ON THE DE-
SCRIPTION OF HIGHWAY.

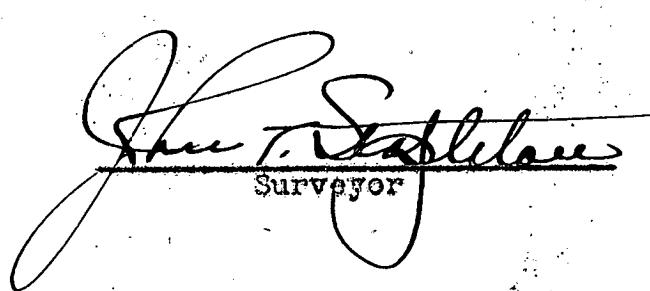
TO THE BOARD OF COUNTY COMMISSIONERS, MONROE COUNTY, INDIANA:

Pursuant to the directions, as heretofore made, I the undersigned Surveyor for the County of Monroe hereby report that I have surveyed the lands as heretofore requested, and as in the Petition of Gilbert Lemon, et al., filed on December 9th, 1947, for the establishment of a County Road and that said Road is described as follows, to-wit:

A part of the Southwest Quarter of Section 8 and a part of the Northwest Quarter of Section 17, all in Township 9 North, Range 1 West, bounded as follows, to-wit:

Beginning at a point that is 1950 feet east of the northwest corner of said Section 17 in the center of the Kinser Pike, thence running north 11 feet, thence west parallel with the north line of said Section 17 for a distance of 1050 feet, thence running south a distance of 30 feet, thence east parallel with the north line of said section a distance of 1050 feet, thence north a distance of 19 feet to the place of beginning.

DATED at Bloomington, Indiana, this the 5th day of April, A. D. 1948.


John T. Stapleman
Surveyor

#2 - 1513.02' - NORTH + 23' WEST - S.E. COR.

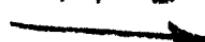
#1 - 1703.02' - NORTH + 23' WEST - S.E. COR

130

10

~~667.8~~

677.8



133

130

283

130

413

130

543

150

733

47

780

130

130

1040

110

11

75

7

23

130

133

130

283

130

413

130

543

130

543

130

133

130

41

780

130

130

130

130

130

110

110

$$\begin{array}{r}
 130 \\
 -4 \\
 \hline
 520 \\
 -100 \\
 \hline
 710 \\
 -47 \\
 \hline
 757 \\
 -360 \\
 \hline
 1117 \\
 -936 \\
 \hline
 210 \\
 -5 \\
 \hline
 1215.6
 \end{array}$$

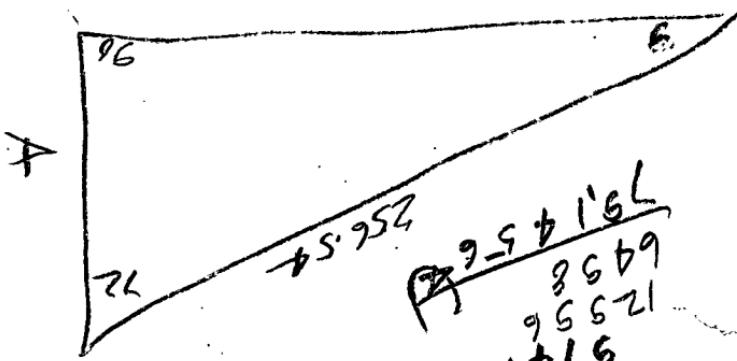
1216

$$\begin{array}{r}
 1216.5 \\
 -113.5 \\
 \hline
 1210.0 \\
 -9.0 \\
 \hline
 1190.0
 \end{array}$$

243.62150
190.26
472.50
570.66
475.50
256.15
195.16

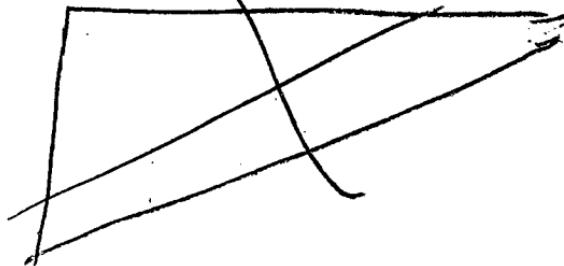
1119.16
79.14
1040.56

1362.50
243.162
1606.12



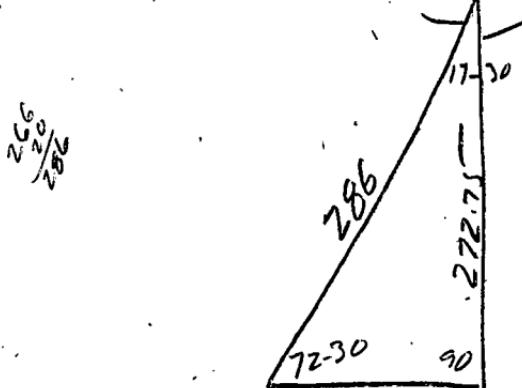
79.1456
645.8
1255.6
574.7
194.94
243.6
324.9

256.54
126.14
130



72.4

(78)



$$\begin{array}{r} 72-30 \\ 90.04 \\ \hline 16230 \end{array}$$

$$\begin{array}{r} 189-80 \\ 162-30 \\ \hline 17.30 \end{array}$$

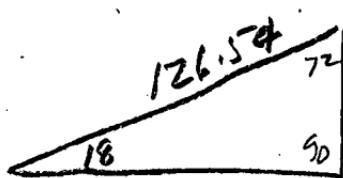
$$\begin{array}{r} 9537 \\ 286 \\ \hline 157222 \\ 16296 \\ \hline 19074 \\ \hline 2727582 \end{array}$$

$$\begin{array}{r} 1520.05 \\ 86.07 \\ \hline 1606.12 \end{array}$$

$$\begin{array}{r} 3153 \\ 273 \\ \hline 9459 \\ 22071 \\ 6306 \\ \hline 860769 \end{array}$$

$$\begin{array}{r} 1313.31 \\ 272.75 \\ \hline 1040.56 \end{array}$$

77



$$\begin{array}{r} 90 \\ 14 \\ \hline 108 \\ 108 \\ \hline 0 \end{array}$$

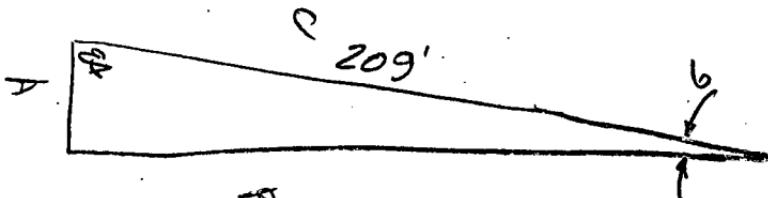
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 9510 \\
 12615 \\
 \hline
 97550 \\
 57060 \\
 19020 \\
 9510 \\
 \hline
 12030150
 \end{array}$$

$$\begin{array}{r}
 3249 \\
 120 \\
 \hline
 69580 \\
 3245 \\
 \hline
 385880
 \end{array}$$

$$\begin{array}{r}
 1606.12 \\
 120130 \\
 \hline
 1485.82
 \end{array}$$

$$\begin{array}{r}
 1040.56 \\
 39.10 \\
 \hline
 1079.56
 \end{array}$$

(75)



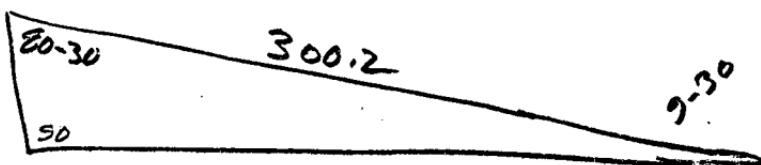
$$\begin{array}{r}
 1016.34 \\
 207.85 \\
 \hline
 1224.19 \\
 295.86 \\
 \hline
 1520.05
 \end{array}$$

$$\begin{array}{r}
 19945 \\
 \hline
 209 \\
 \hline
 89505 \\
 19890 \\
 \hline
 2078503
 \end{array}$$

$$\begin{array}{r}
 1241.93 \\
 21.86 \\
 \hline
 1263.79 \\
 49.52 \\
 \hline
 1313.31
 \end{array}$$

$$\begin{array}{r}
 47.2 \\
 130.0 \\
 \hline
 123 \\
 \hline
 300.2
 \end{array}$$

$$\begin{array}{r}
 1051 \\
 208 \\
 \hline
 8408 \\
 2102 \\
 \hline
 248608
 \end{array}$$



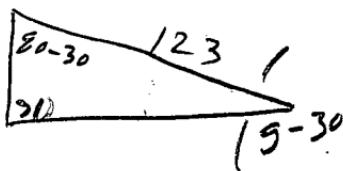
$$\begin{array}{r}
 1673 \\
 1296 \\
 \hline
 10038 \\
 15057 \\
 \hline
 3346 \\
 \hline
 49.5208
 \end{array}$$

$$\begin{array}{r}
 9862 \\
 \hline
 302 \\
 \hline
 2958600
 \end{array}$$

$$\begin{array}{r}
 89-60 \\
 9-30 \\
 \hline
 86-30
 \end{array}$$

$$\begin{array}{r}
 1520.05 \\
 677.80 \\
 \hline
 84225
 \end{array}$$

~~\$80~~



9862

123

29586

19724

5862

121,3026

209.70

196.54

406.24

145.70

130.00

126.54

406.24

1673

121

1673

3346

1673

20,2533

1520.05

121.30

1398.75

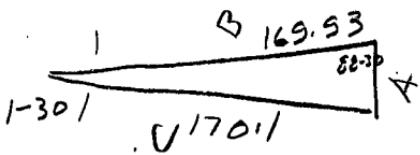
121
20.03

1313.31

20.25

1293.06

66



$$\begin{array}{r} 9996 \\ 170 \\ \hline 699720 \\ 9996 \\ \hline 1699320 \end{array}$$

$$\begin{array}{r} 0715 \\ 170 \\ \hline 50050 \\ 5005 \\ \hline 0715 \\ 121550 \end{array}$$

$$\begin{array}{r} 0261 \\ 170 \\ \hline 18270 \\ 0261 \\ \hline 4.4370 \end{array}$$

~~80.1~~

806.41

169.93

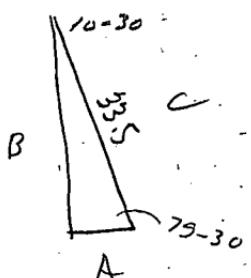
976.34

1337.50

4.43

1341.93

#65

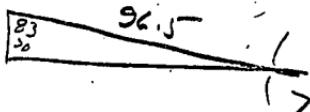


$$\begin{array}{r} 85-60 \\ 10-30 \\ \hline 75-30 \end{array}$$

$$\begin{array}{r}
 98.32 \\
 33 \\
 \hline
 49160 \\
 29496 \\
 \hline
 29496 \\
 \hline
 32837.20
 \end{array}$$

$$\begin{array}{r}
 32.84 \\
 95.77 \\
 \hline
 128.61 \\
 677.80 \\
 \hline
 806.41
 \end{array}$$

677.81

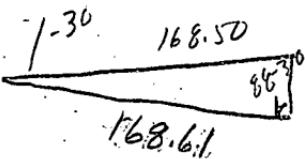


$$\begin{array}{r}
 32.84 \\
 95.77 \\
 40.00 \\
 \hline
 168.61
 \end{array}$$

677.80

846.41

$$\begin{array}{r}
 9925 \\
 96.5 \\
 \hline
 49625 \\
 59350 \\
 \hline
 89325 \\
 \hline
 33776.25
 \end{array}$$



$$\begin{array}{r}
 85-60 \\
 130 \\
 \hline
 88-30
 \end{array}$$

0174

9993



9781

2125

$$\begin{array}{r}
 1120.65 \\
 122.00 \\
 \hline
 998.65
 \end{array}$$

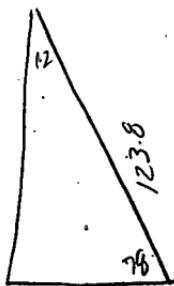
$$\begin{array}{r}
 990.23 \\
 25.50 \\
 \hline
 564.73
 \end{array}$$

32.84
51.71
128

(68)

50
78
12

B



A

$$\begin{array}{r} 9781 \\ -124 \\ \hline 39124 \\ -19562 \\ \hline 9781 \\ \hline 121.2844 \end{array}$$

$$\begin{array}{r} 976.34 \\ -25.71 \\ \hline 950.63 \end{array}$$

$$\begin{array}{r} 22 \quad 2125 \\ -121 \\ \hline 2125 \\ -4250 \\ \hline 2125 \\ \hline 23,7125 \end{array}$$

$$\begin{array}{r} 1241.93 \\ -121.28 \\ \hline 1120.65 \end{array}$$

$$\begin{array}{r} 1341.93 \\ -121.28 \\ \hline 1220.65 \end{array}$$

353

$$\begin{array}{r} 576.34 \\ -677.04 \\ \hline 298.54 \end{array}$$

$$\begin{array}{r} 846.41 \\ 169.93 \\ \hline 1016.34 \\ 576 \end{array}$$

$$\begin{array}{r} 806.41 \\ 677.80 \\ \hline 128.61 \end{array}$$

$$\begin{array}{r} 1016.34 \\ 677.80 \\ \hline 338.54 \\ 12 \end{array}$$

$$\begin{array}{r} 1016.34 \\ -25.71 \\ \hline 990.63 \end{array}$$

.8870

3249

$$\begin{array}{r} 170 \\ \hline 620900 \\ 8870 \\ \hline 150,7900 \end{array}$$

765.5095

1552.92

76.50

$$\begin{array}{r} 1476.42 \end{array}$$

323

150.79

$$\begin{array}{r} 473.79 \end{array}$$

9510

130

285300

9510

123,6300



$$\begin{array}{r} + 38 \\ \hline 212 \end{array}$$

$$\begin{array}{r} - 292 \\ \hline \end{array}$$

$$\begin{array}{r} 212 \\ - 051 \\ \hline \end{array}$$

$$\begin{array}{r}
 109.5 \\
 109.5 \\
 \hline
 597.5 \\
 385.5 \\
 \hline
 1155 \\
 \hline
 1155.025
 \end{array}$$

$$\begin{array}{r}
 .9702 \\
 130 \\
 \hline
 291.060 \\
 9702 \\
 \hline
 126.1260
 \end{array}$$

$$\begin{array}{r}
 109 \\
 109 \\
 \hline
 981 \\
 109 \\
 \hline
 11881
 \end{array}$$

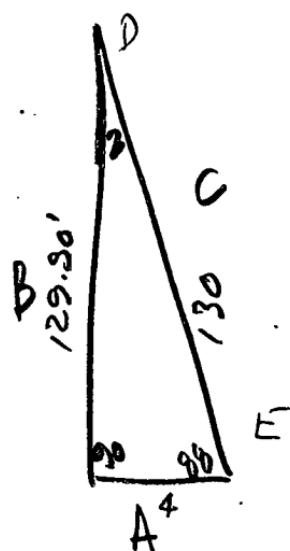
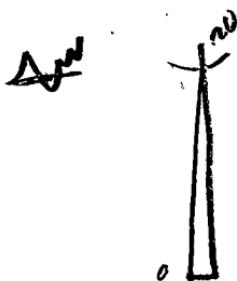
2453

$$\begin{array}{r}
 108 \\
 108 \\
 \hline
 860 \\
 108 \\
 \hline
 11664
 \end{array}$$

16

$$\begin{array}{r}
 110 \\
 110 \\
 \hline
 1100 \\
 110 \\
 \hline
 12100 \\
 16 \\
 \hline
 12084
 \end{array}$$

$$\begin{array}{r}
 129 \\
 128 \\
 \hline
 12900 \\
 23 \\
 \hline
 38700 \\
 25800 \\
 \hline
 296700
 \end{array}$$



$$B \times \tan 36^\circ = A$$

$$C \times \sin 36^\circ = B$$

$$\begin{array}{r}
 9993 \\
 130 \\
 \hline
 299790 \\
 9553 \\
 \hline
 1299096
 \end{array}$$

$$\begin{array}{r}
 0349 \\
 129.9 \\
 \hline
 231.41 \\
 314.1 \\
 0698 \\
 0349 \\
 \hline
 453 3.551
 \end{array}$$

1363.02

$$\begin{array}{r} 150 \\ \hline 1513.02 \\ -40 \\ \hline 1553.02 \\ -150.00 \\ \hline 1703.02 \end{array}$$

1363.02

$$\begin{array}{r} 150 \\ \hline 1513.02 = 2 \\ 150 \\ \hline 1663.02 = 57 \\ -40 \\ \hline 1703.02 \end{array}$$

$$\begin{array}{r} 70 \\ @6 \\ \hline 500 \\ -40 \\ \hline 100 \\ \hline 1040 \\ -42.8 \\ \hline 1082.8 \\ -147.2 \\ \hline 1230.0 \\ -224.0 \\ \hline 1454.00 \\ -4072 \\ \hline 1054.72 \\ -220.50 \\ \hline 1715.20 \end{array}$$

12 goe

$$\begin{array}{r} 6500 \\ - 6300 \\ \hline 2100 \\ - 1200 \\ \hline \end{array}$$

12

70 714

$$\begin{array}{r} 500 \\ - 450 \\ \hline 100 \\ - 70 \\ \hline 300 \end{array}$$

45-26
50-52

50 2

$$360) \overline{510}$$

360 52

12 $2\pi R = 628,32$
360) 1000 5729

62832) 360,000
314162
458380
439824
185560
125664
558960
565488
334720

628,32 = 360

2\pi R = $3,1416 \times 2 = 6,2832 \times \frac{100}{100} = 628,32$

$$\begin{array}{r} 62832 \\ - 50 \\ \hline 5654880 = 360^\circ \end{array}$$

$$\begin{array}{r} 48.65 \overline{) 565.49} \\ \underline{486.5} \\ 7890 \\ \underline{4865} \\ 30850 \\ \underline{25190} \\ \hline 65 \\ .6 \\ \hline 36.0 \end{array}$$

$$\begin{array}{r} 62832 \\ - 50 \\ \hline 3141600 \quad (11) \\ \underline{2852} \\ 2836 \\ \underline{2852} \\ 34 \end{array}$$

$$62832$$

$$55 \overline{)439.8240} \quad | \frac{8}{= 1360}$$

$$55 \overline{)440} \quad | \underline{440}$$

$$37.67$$

$$\begin{array}{r} 37.67 \\ - 75.34 \\ \hline = 6.43 \end{array}$$

$$\begin{array}{r} 67 \\ - 40.2 \\ \hline \end{array}$$

$$62832$$

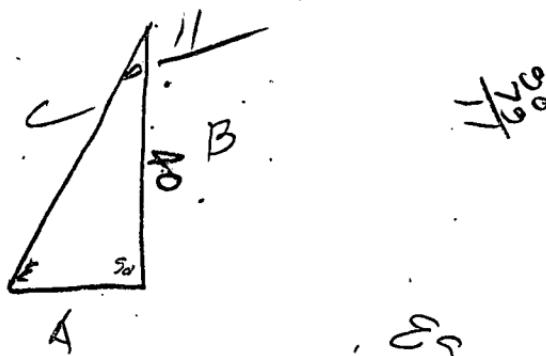
$$15.62 \overline{)314.1600} \quad | \frac{5.61}{15.62}$$

$$\begin{array}{r} 15 \\ 20 \overline{)314} \\ - 20 \\ \hline 114 \\ - 114 \\ \hline 0 \end{array}$$

$$\begin{array}{r} 1 \\ 27 \overline{)314} \\ - 27 \\ \hline 44 \\ - 44 \\ \hline 0 \end{array}$$

$$\begin{array}{r} 270 \\ 15 \\ \hline 285 \end{array} \qquad \begin{array}{r} 18 \\ 3 \\ \hline 23 \end{array}$$

$$\left\{ \begin{array}{l} 23 \\ 127.3 \\ \hline 150.3 \end{array} \right.$$



$$\begin{array}{r} 85 \\ 75.30 \\ \hline 10.30 \end{array}$$

$$\begin{array}{r} 1,018 \\ 40 \\ \hline 4,0120 \end{array}$$

$$\frac{270}{\cdot}$$

$$\begin{array}{r} 285 \\ 220.3 \\ \hline 505.5 \\ 40.72 \\ \hline 546.28 \end{array}$$

$$\begin{array}{r}
 1703.20 \\
 -150 \\
 \hline
 1853.20 \\
 -285 \\
 \hline
 1568.20 \\
 -150 \\
 \hline
 1718.20
 \end{array}$$

$$\begin{array}{r}
 2000.22 \\
 -285 \\
 \hline
 1715.22 \\
 -1715 \\
 \hline
 1.22
 \end{array}$$

$$\begin{array}{r}
 270 \\
 -15 \\
 \hline
 285 - 11 \\
 2205 \\
 \hline
 505.50 \\
 40.72 \\
 \hline
 546.22 - 10 \\
 112.00 \\
 \hline
 634.22 = 80 \\
 112.00 \\
 \hline
 722.22 - 8 \\
 150 \\
 \hline
 520.22 - 9 \\
 150.00 \\
 \hline
 1070.22 - 6 \\
 147.20 \\
 \hline
 1217.42 \\
 42.80 \\
 \hline
 1260.22
 \end{array}$$

$$\begin{array}{r}
 1070.22 \\
 -447.20 \\
 \hline
 1217.42 \\
 42.80 \\
 \hline
 1260.22 - 5 \\
 100 \\
 \hline
 1360.22 - 4 \\
 4150.00 \\
 \hline
 1510.22 - 3 \\
 150.00 \\
 \hline
 1660.22 - 2 \\
 150.00 \\
 \hline
 1810.22 - \\
 90.00 \\
 \hline
 1850.22 - 1 \\
 150.00 \\
 \hline
 2000.22
 \end{array}$$

$$\begin{array}{r}
 285 = S \# 11 \\
 22.05 \\
 \hline
 505.50 \\
 4072 \\
 \hline
 546.22 \\
 112.02 \\
 \hline
 638.22 - 5 \\
 112.02 \\
 \hline
 770.22 - 8 \\
 150.02 \\
 \hline
 520.22 - 7 \\
 150.02 \\
 \hline
 1070.22 - 6 \\
 147.2 \\
 \hline
 1217.42 \\
 42.80 \\
 \hline
 1260.22 - 5 \\
 100 \\
 \hline
 1360.22 - 4
 \end{array}
 \quad \left. \right\} \quad
 \begin{array}{r}
 1113.02 \\
 1070.22 \\
 \hline
 142.80
 \end{array}$$

$$\begin{array}{r}
 1072.22 \\
 147.120 \\
 \hline
 1219.42 \\
 42.80 \\
 \hline
 1262.22 \\
 1113.02 \\
 \hline
 49.80
 \end{array}$$

$$\begin{array}{r}
 1262.22 \\
 590 \\
 \hline
 1852.22 \\
 150 \\
 \hline
 2002.22 \\
 285.00 \\
 \hline
 1717.20
 \end{array}$$

1141.52

85-

1226.52 -

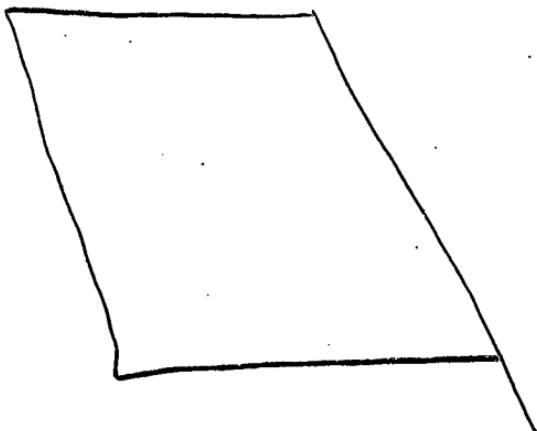
130.00

1356.52 X 1 - 40

1552.52

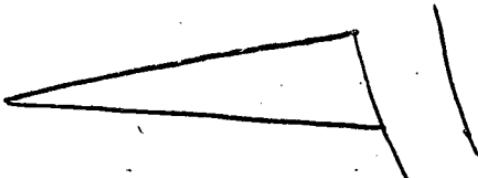
150.00
1702.52

215 -



130
81
27

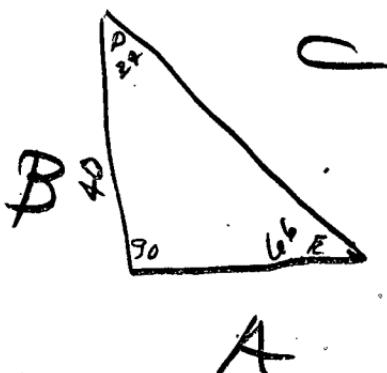
123
109
232



1356.52
156
155 60
2,32

$$\begin{array}{r} 20 \\ 66 \\ \hline 86 \end{array}$$

$$\begin{array}{r} 130 \\ 23 \\ \hline 153 \end{array}$$



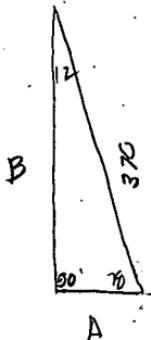
$$\begin{array}{r} 200,5 \\ 17,8 \\ \hline 218,3 \end{array}$$

13

$$\begin{array}{r} 4452 \\ 44 \\ \hline 17,8000 \end{array}$$

$$\begin{array}{r} 1360,22 \\ 218,30 \\ \hline 1141,92 \end{array}$$

$$\begin{array}{r} 260 \\ 23 \\ \hline 283 \\ 40 \\ \hline 323 \end{array}$$



$\frac{56}{18}$
 $\frac{12}{12}$

128.7

2

128.5

$$\begin{array}{r}
 0.038 \\
 48 \\
 \hline
 0.304 \\
 0.152 \\
 \hline
 1.824
 \end{array}$$

$$\begin{array}{r}
 5781 \\
 370 \\
 \hline
 684.670 \\
 293.43 \\
 \hline
 361.8970
 \end{array}$$

$$\begin{array}{r}
 869.52 \\
 767.5 \\
 \hline
 792.77
 \end{array}$$

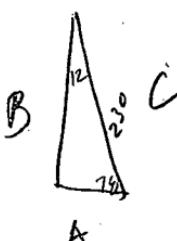
$$\begin{array}{r}
 4250 \\
 12750 \\
 5375 \\
 \hline
 76.9250
 \end{array}$$

19-

$$\begin{array}{r}
 223.96 \\
 128.90 \\
 \hline
 352.86 \\
 33 \\
 23 \\
 \hline
 37.86 \\
 37
 \end{array}$$

$$\begin{array}{r}
 361.89 \\
 23 \\
 \hline
 384.89 \\
 128.00 \\
 \hline
 513.79
 \end{array}$$

$$\begin{array}{r}
 869.52 \\
 47.60 \\
 \hline
 821.92
 \end{array}$$



$$\begin{array}{r}
 2125 \\
 224 \\
 \hline
 8500 \\
 4250 \\
 \hline
 4250 \\
 \hline
 47.6000
 \end{array}$$

$$\begin{array}{r}
 369.8 \\
 135.8 \\
 \hline
 230.0
 \end{array}$$

$$\begin{array}{r}
 5781 \\
 230 \\
 \hline
 293430
 \end{array}$$

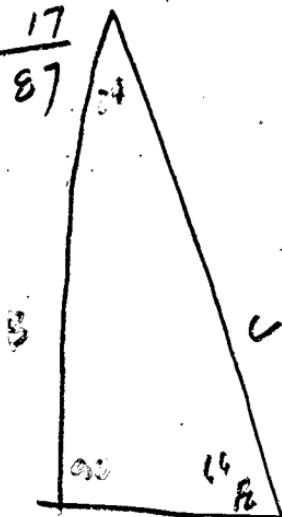
$$\begin{array}{r}
 19462 \\
 \hline
 2235630
 \end{array}$$

$$\begin{array}{r}
 0038 \\
 45 \\
 \hline
 190 \\
 152 \\
 \hline
 1710
 \end{array}$$

$$\begin{array}{r}
 128.7 \\
 23 \\
 \hline
 151.70
 \end{array}$$

$$\begin{array}{r}
 17 \\
 \hline
 151.87
 \end{array}$$

$$\begin{array}{r}
 1070.22 \\
 147.22 \\
 \hline
 1217.42 \\
 55 \\
 \hline
 1162.42 \leftarrow \\
 292.90 \\
 \hline
 869.52
 \end{array}$$



$$\begin{array}{r}
 4 \\
 55
 \end{array}$$

$$\begin{array}{r}
 131.8 \\
 127.7 \\
 \hline
 123.41
 \end{array}$$

$$\begin{array}{r}
 444
 \end{array}$$

$$\begin{array}{r}
 154.87 \\
 151.87 \\
 \hline
 3.8
 \end{array}$$

100
134
230
139.8
363.8

16
14
12
10
8
6
4
2
0

749.57
126
869 57

116 6.12
292 90
873 226

293

185767

21

३०

19 L58
13
64 858
985
4892
63
552
552

~~0038~~
~~24~~
~~132.51~~
~~0152~~
~~0076~~
~~0091~~
~~23~~
~~132.42~~
~~155.42~~
~~285~~
~~220.3~~
~~505.30~~
~~40.72~~
~~145.02~~

~~285.0~~
~~220.5~~
~~505.5~~
~~40.72~~
~~22~~

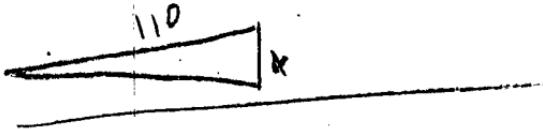
~~132.47~~
~~23~~
~~155.47~~

~~6038~~
~~135~~
~~510.~~
~~205~~
~~1050~~
~~1.90~~

~~546.22~~
~~25.75~~
~~520.47~~

~~0038~~
~~120~~
~~00760~~
~~0038~~
~~4560~~

~~135~~
~~0038~~
~~1080~~
~~5050~~
~~5130~~
~~20.47~~
~~109.60~~
~~630.07~~



~~630.07~~
~~119.50~~
~~749.57~~

~~155.42~~
~~46~~
~~154.96~~

~~15~~
~~131.8~~
~~23~~
~~154.8~~

9135

$$\begin{array}{r} 90 \\ 79 \\ \hline 16 \end{array}$$

$$\begin{array}{r} 180 \\ 169 \\ \hline 11 \end{array}$$

132.5

$$\begin{array}{r} 132 \\ 123 \\ \hline 9 \end{array}$$

.9816

$$\begin{array}{r} 135 \\ \hline 49080 \end{array}$$

29448

9816

1325160

$$\begin{array}{r} 132.51 \\ 23 \\ \hline 155.58 \\ 46 \\ \hline 32 \\ 15 \end{array}$$

146.32
132

1943

132.5

3715

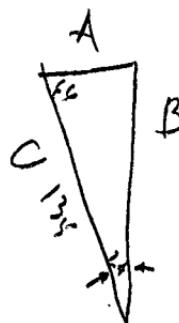
$$\begin{array}{r} 132.51 \\ 23 \\ \hline 153.51 \end{array}$$

$$\begin{array}{r} 33886 \\ 5829 \\ 1943 \\ \hline 25.74475 \end{array}$$

30
66
4

$$\begin{array}{r} 127 \\ 123 \\ \hline 150 \end{array}$$

146.32 W



~~$$\begin{array}{r} 132.51 \\ 23 \\ \hline 155.51 \end{array}$$~~

$$\begin{array}{r} 128.7 \\ 23.7 \\ \hline 151.7 \end{array}$$

132.1
132.1
132.1

A

150
0

C

132.1
132.1
132.1

131.8
131.8
131.8

B

132.0
132.0
132.0

24.1 700
74.1 003

24.1 700
74.1 002

132.0
132.0
132.0

150 011
150 1.70
150 1.24
150 2.06

~~153~~
~~30~~
~~283~~
~~130~~
~~113~~
~~130~~
~~143~~
~~190~~
~~133~~
~~131~~
~~40~~
~~130~~
~~930~~
~~100~~
~~1140~~
~~936~~
~~12386~~

153.1
4
149.1

270
15
285

20

161.3
18
179.3

127.3
115
242.3
23
265.3

130
~~130~~
~~130~~

131

$$80 \overline{) 400}$$

.5

$$400$$

$$\begin{array}{r} 26 \quad 34 \\ 26 - 34 \\ \hline 52 \end{array}$$

$68 = 53.08$

$$360 \overline{) 800}$$

.22

$$\begin{array}{r} 720 \\ 800 \\ 720 \\ \hline 80 \end{array}$$

$$360 \overline{) 53.08}$$

.14

$$\begin{array}{r} 360 \\ 1700 \\ 1440 \\ \hline 260 \end{array}$$

$$360 \overline{) 510}$$

.14-1

$$\begin{array}{r} 360 \\ 1500 \\ 1440 \\ \hline 600 \\ 360 \\ \hline 240 \end{array}$$

$$80 \overline{) 625}$$

$$80 \overline{) 500}$$

$$480 \overline{) 200}$$

$$160 \overline{) 400}$$

$$360 \overline{) 51}$$

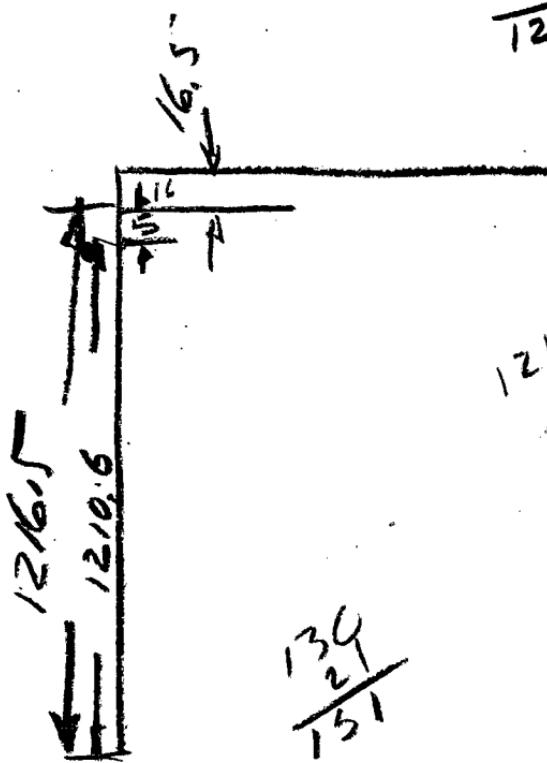
$$\begin{array}{r} 3.1416 \\ \times 2 \\ \hline 62832 \\ -80 \\ \hline 50.26\cancel{8}60 \end{array}$$

$$\begin{array}{r} 38-41 \\ 38-41 \\ \hline 76-81 \\ 60 \\ \hline 77-21 \end{array}$$

$$\begin{array}{r} 625 \overline{) 5000} \\ 5000 \\ \hline .00 \end{array}$$

23
21.5
150

1216.5
1211.5

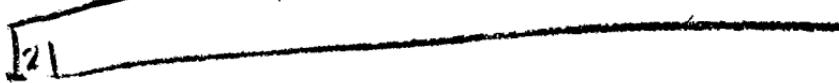


1210.6
1237.5

134
151

1210.6
1231.6

23



21,5

130,0
151,5

130
281,5

130
411,5

130
541,5

130
731,5

47
778,5

130,0
508,5

130
1038,5

106
1138,5

53,6
1232,8

1233,6
1232,8
1,5

0349

130

10470

0349

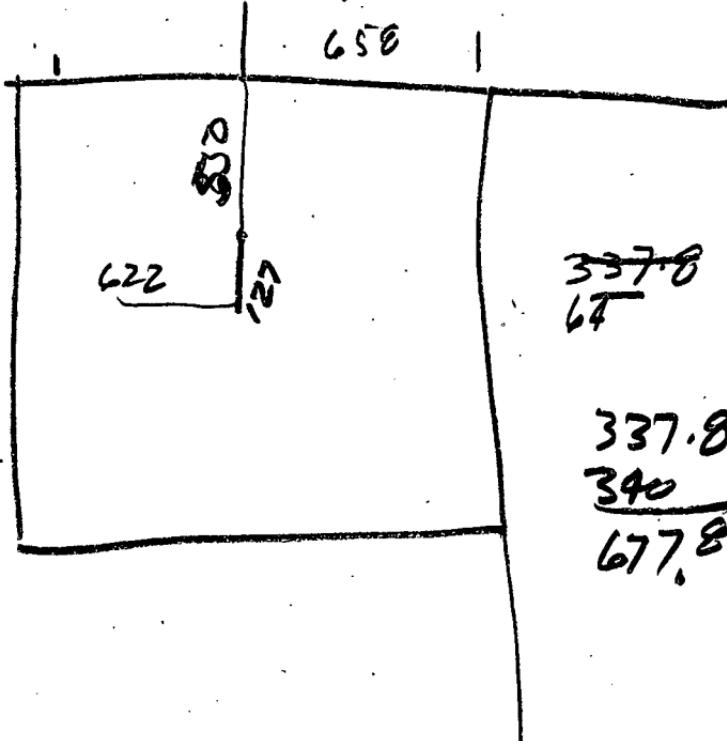
4,5370

550
127
677.7

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550
127
677

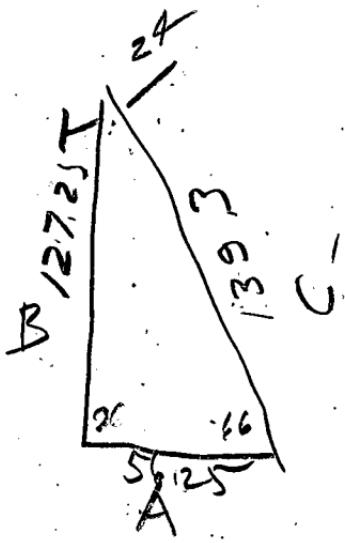
650
650



337.8

340

677.8



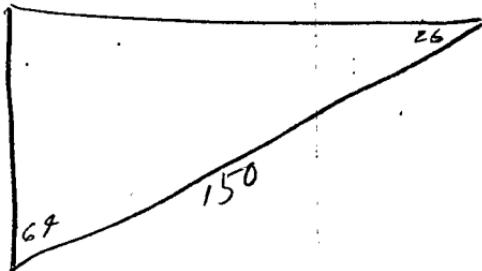
$$\begin{array}{r}
 323.00 \\
 127.25 \\
 \hline
 450.25
 \end{array}$$

4452

$$\begin{array}{r}
 9135 \\
 139.3 \\
 \hline
 27405 \\
 27405 \\
 \hline
 9135 \\
 \hline
 127.25053
 \end{array}$$

$$\begin{array}{r}
 127.25 \\
 4452 \\
 \hline
 25456 \\
 25456 \\
 \hline
 63625 \\
 63625 \\
 \hline
 50900 \\
 50900 \\
 \hline
 56251600 \\
 \hline
 56.25
 \end{array}$$

$$\begin{array}{r}
 1141.92 \\
 56.25 \\
 \hline
 1085.67
 \end{array}$$



$$\begin{array}{r}
 8588 \\
 150 \\
 \hline
 449400 \\
 8588 \\
 \hline
 134.8208
 \end{array}$$

48.77

$$\begin{array}{r}
 1422.86 \\
 134.82 \\
 \hline
 1288.04
 \end{array}
 \qquad
 \begin{array}{r}
 903.69 \\
 65.90 \\
 \hline
 569.59
 \end{array}$$

66

4877
198

1571.16
148.30
1422.86

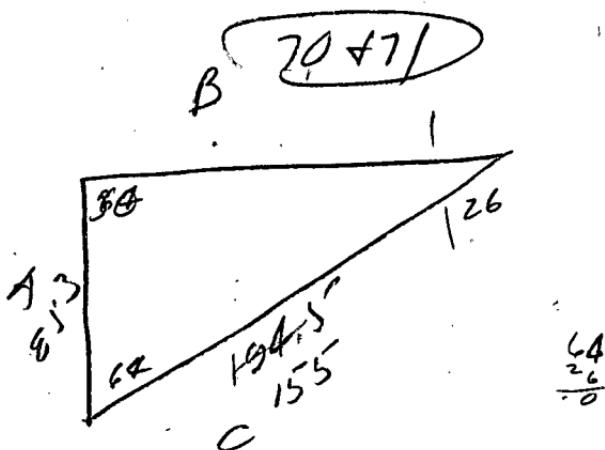
831.49
72.20
903.69

2000

~~120000~~

1323

~~2225~~ 2225 X10
~~2225~~ 2225 X10
~~2225~~ 2225 X10
~~2225~~ 2225 X10



8988

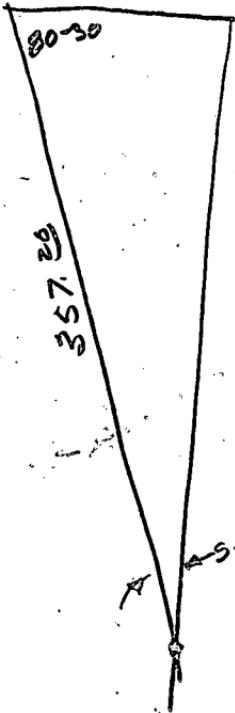
$$\begin{array}{r}
 1547.37 \\
 174.50 \\
 \hline
 1372.87 \\
 \underline{174} \\
 \hline
 142.87
 \end{array}$$

4877

$$\begin{array}{r}
 688.49 \\
 85.30 \\
 \hline
 773.79
 \end{array}$$

$$\begin{array}{r}
 1372.87 \\
 139.00 \\
 \hline
 1233.87 - 50
 \end{array}
 \qquad
 \begin{array}{r}
 773.79 \\
 67.80 \\
 \hline
 841.59
 \end{array}$$

72



~~145.00
42.20
87.20
150.00
337.20
357.20~~

$$\begin{array}{r} 1606.12 \\ 58.75 \\ \hline 1547.37 \end{array}$$

$$\begin{array}{r} 1040.56 \\ 352.07 \\ \hline 688.45 \end{array}$$

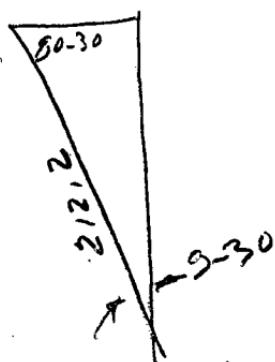
$$\begin{array}{r} .9862 \\ 357 \\ 65.034 \\ 493.6^{\circ} \\ 295.8 \\ \hline 352.0734 \end{array}$$

S-3

1673

80
80

$$\begin{array}{r} 85-60 \\ 80-30 \\ \hline 5-30 \end{array}$$



$$\begin{array}{r} 20 \\ 150 \\ 170 \\ 42.2 \\ \hline 212.2 \end{array}$$

9862
212
19724
9862
19724
209.0744

1673
209
15057
3346
349657

1040.56
209.07
831.49

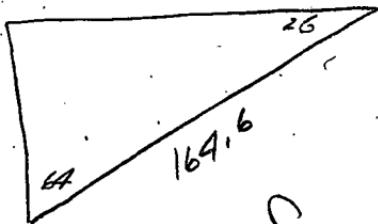
1606.12
34.96
1571.16

$$\begin{array}{r} 50 \\ 26 \\ \hline 64 \\ 26 \end{array}$$

B

A

C



$$\begin{array}{r} 8988 \\ - 165 \\ \hline 44940 \\ - 53928 \\ \hline 8988 \\ \hline 1083020 \end{array}$$



K

$$\begin{array}{r} 415.8 \\ - 242 \\ \hline 173.8 \end{array}$$

180

3.1416

180

25) 3280

31416

5654880 = 62

6.28

30) 565.48

540

28

254

6

180

-168

740

3.1416

140

1256640

31416

4358240

28
,6

17.6

70) 5729

6.28

4370) 7410

42

200

140

600

$$3,141\cancel{6}$$

$$\overline{50}$$

$$15\overline{7}0800$$

$$3-14 \quad \frac{14}{6}$$

$$50 \overline{)157}$$

$$\begin{array}{r} 150 \\ 70 \\ \hline 50 \\ \hline 200 \end{array}$$

6283200

$$314,1600$$

$$\overline{6-28}$$

$$50 \overline{)314.16}$$

$$\begin{array}{r} 300 \\ 141 \\ \hline 100 \\ \hline 41 \end{array}$$

$$\begin{array}{r} 002'827 \\ \hline 202 \\ 914'8 \end{array}$$

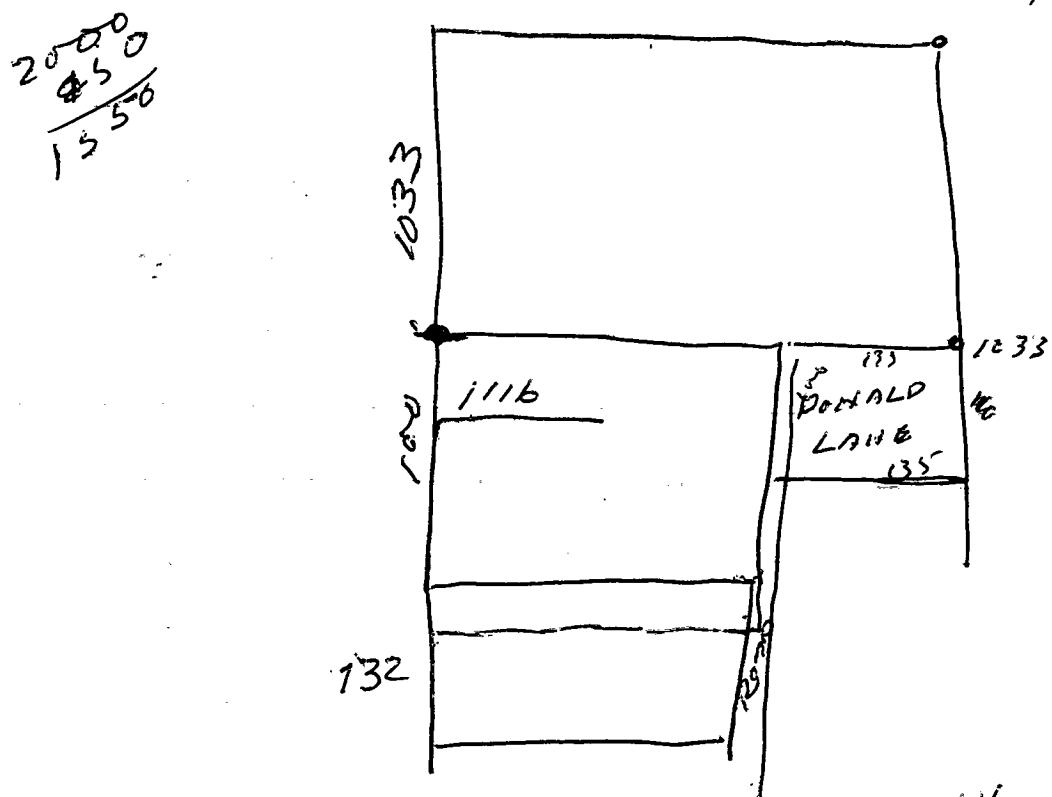
~~1070.88~~
~~95.90~~
~~216.612~~

1070.88
95.90
1166.12N

16.5
5
21.5

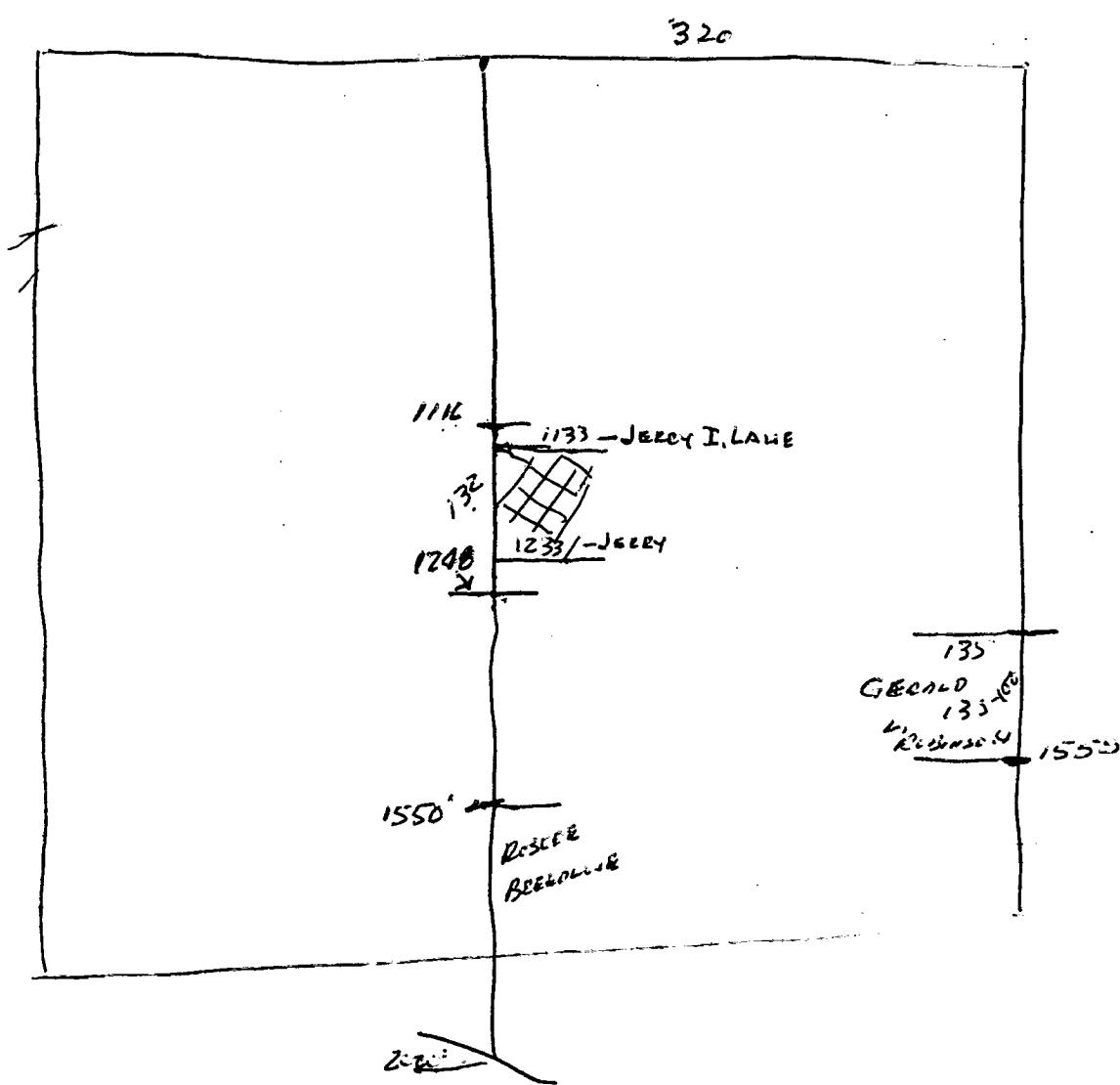
$$\begin{array}{r} 150 \\ 130 \\ \hline 4500 \\ 150 \\ \hline 19500 \\ 23 \\ \hline 58500 \\ 39000 \\ \hline 448500 \end{array}$$
$$\begin{array}{r} 1513.02 \\ 150.00 \\ \hline 1363.02 \\ 150.00 \\ \hline 1213.02 \end{array}$$
$$\begin{array}{r} 200 \\ 150 \\ \hline 350 \\ 2 = 175 \\ 130 \\ \hline 5250 \\ 175 \\ 22750 \\ 23 \\ \hline 68250 \\ 48500 \\ \hline 22250 \end{array}$$

1116
83
103.3



1116
132
1248

RUNNIN TO EZRA LANE—
EZRA M LANE - TO



C. A. PIKE COMPANY, INC.
CONTRACTORS AND DEALERS
BLOOMINGTON, INDIANA

INDIANA BUILDINGS
CONSTRUCTED

★

University Lutheran Church
Bloomington

 Indiana University Field House
Bloomington

 Municipal Building
Crawfordsville

 Nash Garage
Bloomington

 Montgomery Ward Store
Logansport

 Delta Delta Delta
Bloomington

 Beta Theta Pi
Bloomington

 S. S. Kresge Store
Bloomington

 Kappa Alpha Theta
Bloomington

 Montgomery Ward Store
Crawfordsville

 Kappa Kappa Gamma
Bloomington

 Bloomington Limestone Co.
Bloomington

 Chrysler Garage
Bloomington

 Atlas Plywood Co.
Bloomington

 McCalla School
Bloomington

 High School Gym
Bloomington

 Filtration Plant
Bloomington

 Delta Tau Delta
Bloomington

 Firestone Tire & Rubber Co.
Bloomington

 Elks Home
Bloomington

 Many Fine Residences

Palmer Realty Co.,
Tourner Hotel,
Room # 25,
Bloomington,
Indiana

ATT: Mr. Carlisle

Gentlemen:

We propose to furnish labor and materials to remove the present stone wall in the rear and install reinforced concrete wall from the south line to the north line, 100 ft. of this wall is to be 7 ft. high; 30 ft. of this wall 5 ft. high and the balance on the south end approximately 4ft. high, for the sum of \$3438.00 (Three thousand four hundred and thirty eight dollars.)

Concrete footing to be 8" thick and 4'4" wide.

Our proposal includes the leveling of the alley and the removal of excess dirt now piled up there, as well as the removal from the site of the old stone wall.

We do not include any paving of any sort in the alley.

Completion is subject to WPB approval and priorities. We include all compensation and liability insurance, as required by law.

Trusting that this will give you the information desired, we are

Yours truly,
C.A. PIKE CO, INC.,

BY W.J. Henry
W.J. Henry-Sect'y

WJH:LRS

*Paul J. Carlisle
921 Vanderbilt Ave.
Niagara Falls, N.Y.
Phone: 2-6683,*

Murphy Bros. Constructors

GENERAL CONTRACTING

Bloomington, Indiana

April 6, 1945.

Mr. Paul J. Cariisle,
Bloomington, Indiana.

Dear Sir:-

Re: Concrete Wall
A&P Site.

We agree to furnish materials and complete concrete wall as per drawing marked original for the sum of \$3989.00
Three Thousand Nine Hundred Eighty Nine.

Should rock excavation be necessary below parking lot level add \$464.00
Four Hundred Sixty Four.

As per the drawing marked alternate we agree to furnish materials and complete concrete wall for the sum of \$3677.00

Three Thousand Six Hundred Seventy Seven.

The above proposals include all necessary excavation and replacing iron fence or furnishing 2" pipe rail in place.
Should rock excavation be necessary below parking lot level in the Alternate bid add \$140.00

Very truly yours,

Murphy Bros.

By John W. Murphy.

517 N. Walnut St.
Tel. #3159.

Mr. Earle
Oregon, O.

Phones: 3159
4361

Murphy Bros. Constructors

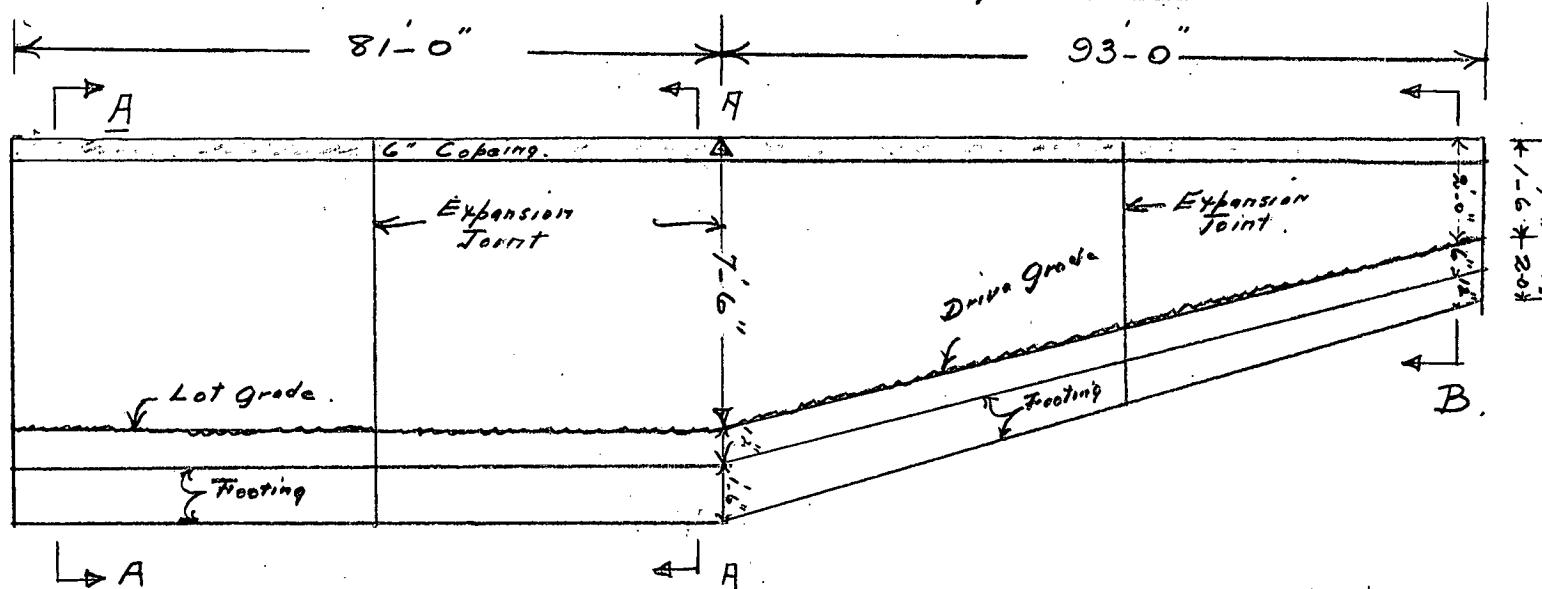
GENERAL CONTRACTING

Bloomington, Indiana

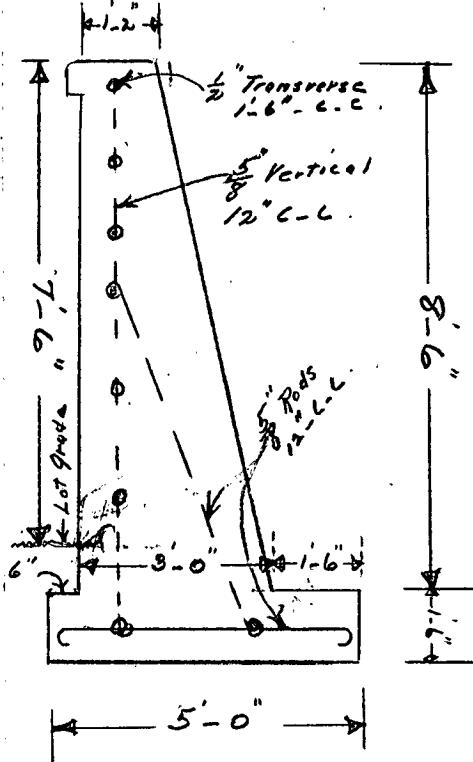
A 9' & P Concrete Wall.

Approx 2'-6" below Parking Lot Level

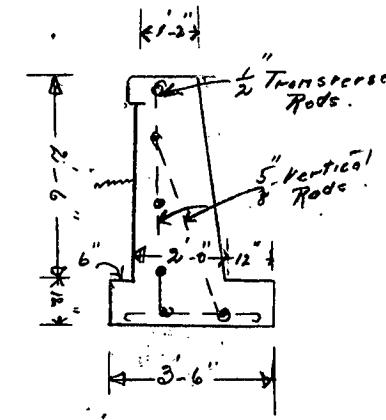
→ S



Not to Scale



Section at A.



Section at B.

Mr. Earle

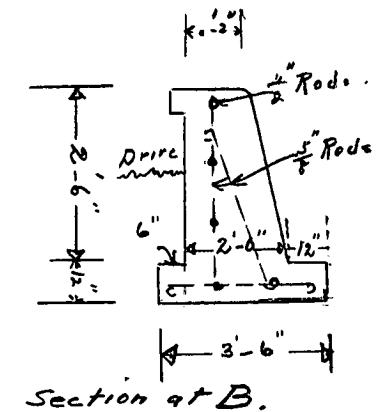
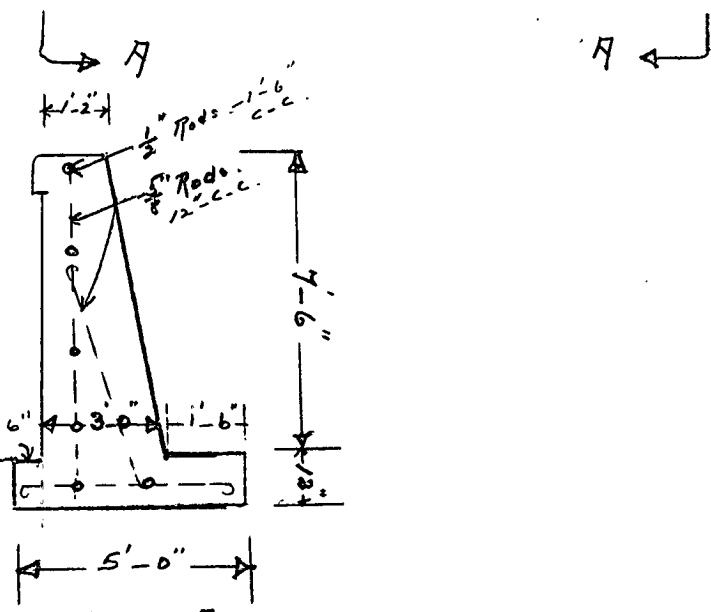
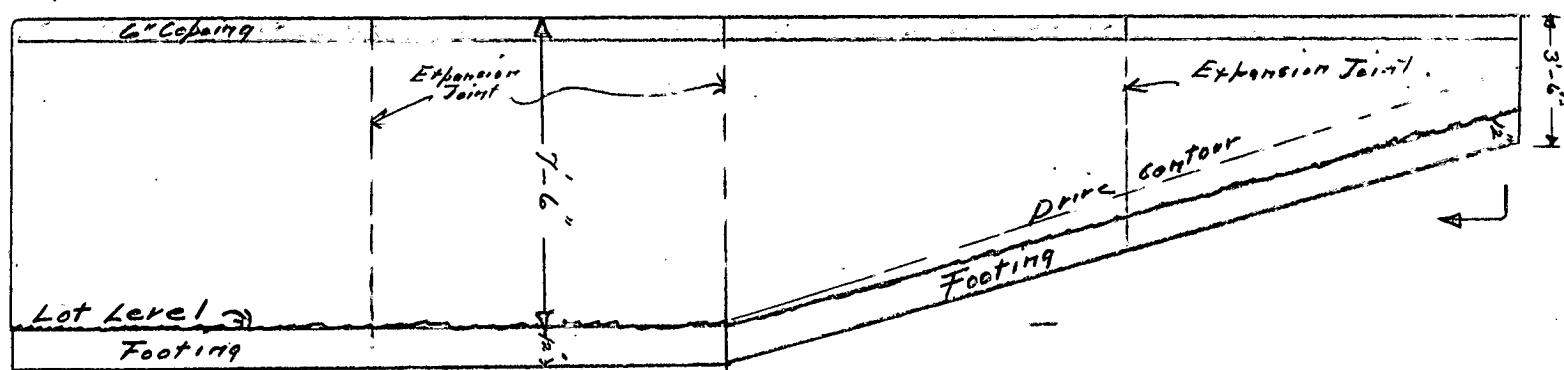
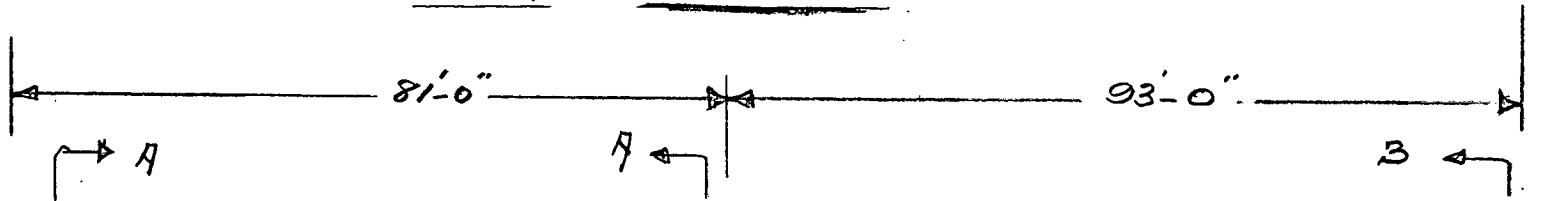
Phones: 3159
4361

Murphy Bros. Constructors

GENERAL CONTRACTING

Bloomington, Indiana

A and P - Alternate



Section at A.

Section at B.

Beg @ W. LINE HIGHLAND AVE & NORTH LINE OF
UNIVERSITY ST. - WEST 133 FT. NORTH 92 FT; EAST
133 + TO W. LINE OF HIGHLAND AVE. SOUTH 92 FT.

ct

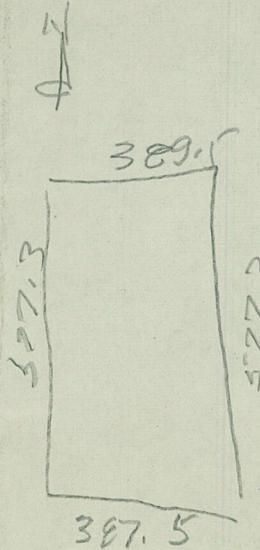
155-37

276' SOUTH + 153' WEST - N.E. COR. SEM. 101

NORTH 138 FT. WEST 60 FT. SOUTH 138; EAST 60 FT.

ct

BEG. @ AT PT. 301 FT South + 213 ft west
of N.E. COR. SEM. 101. NORTH 301 ± TO NORTH LINE SEM. 101
thence westwardly direction to N.E. COR. LOT 16 - OUTLINE
ADD. thence south along east line of lot
in a straight line for 301 ft. ± - EAST
+ 213 ft west of N.E. COR. SEM. 101.
North 163 ft to real point of Begning
NORTH 138 ft ±; westwardly to the N.E. COR. LOT 16,
outlook add - south along east line of lot 16, + 15 -
for 132 ft, thence to pt. of Beg.



26.0
1-1
205.6
205.2

31.0
27.6
34
301
276
28

362
36
363
281
212
231

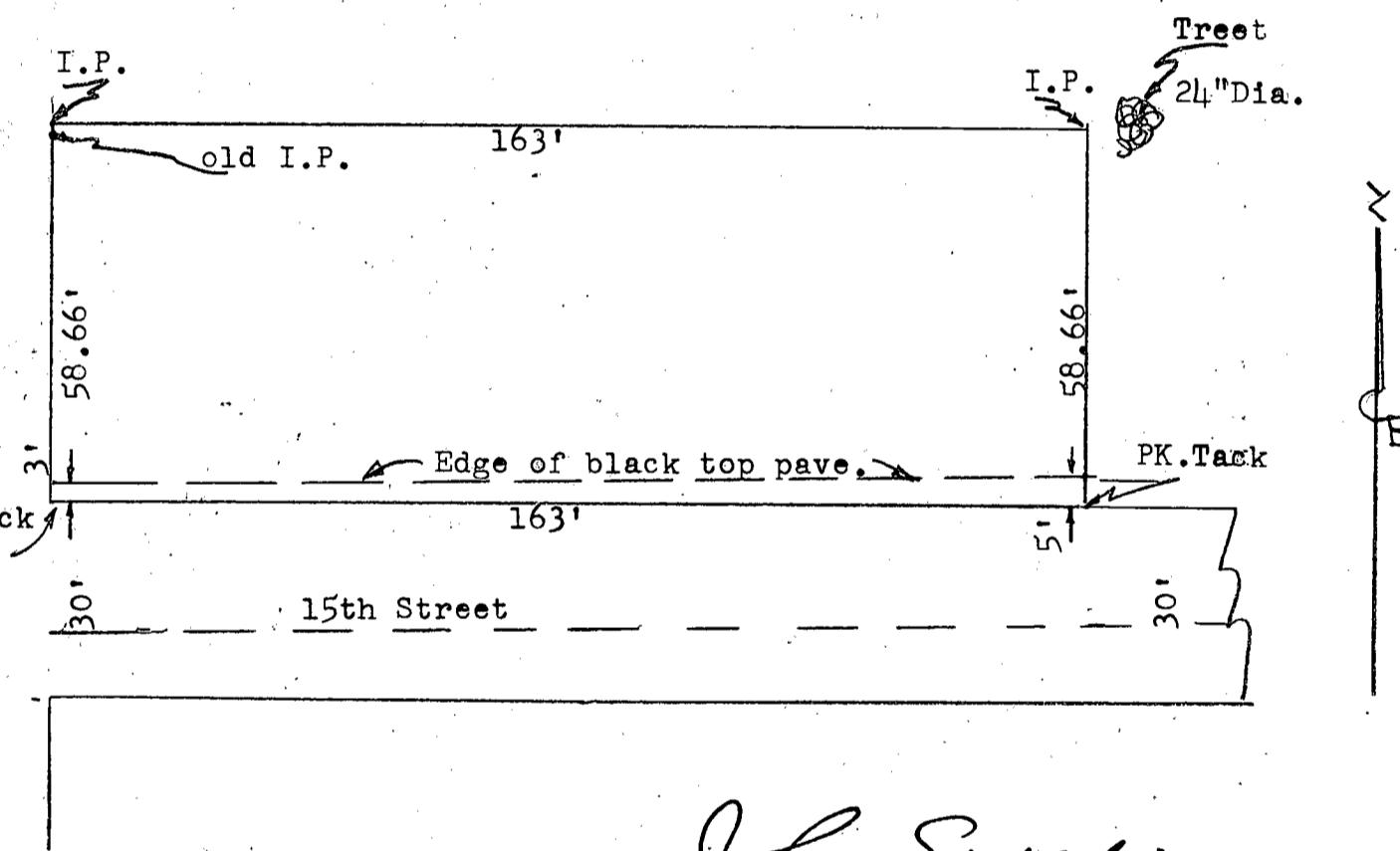
23

234

Field Survey
of
Lot 13-Dolan Add.

May 16, 1966

Street
Jackson



John T. Sipplatt
Civil Engineer & Surveyor

GEO. GASTON NY
LILLIE VOLKER

~~140~~
~~655.5~~
~~293.5~~
~~50.0~~

~~80~~
~~30~~
~~30~~
~~15~~
~~83~~
~~90~~
~~90~~
~~5~~

~~255.1~~
~~280.0~~
~~155~~

~~140~~
~~55.5~~
~~293.5~~
~~50.0~~
~~5.5~~

~~2~~
~~1~~
~~2~~
~~1~~
~~2~~
~~4~~

~~295.5~~
~~150~~
~~180.5~~
~~30~~
~~330.5~~

~~280~~
~~360~~
~~640~~

~~460~~
~~180~~
~~620~~

50

STEPHEN'S STREET

460 S-33-W

360 E-260

360 E-200

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JOHN SCANZONI - Lot 61 - EAST, HGT #61

A PT. OF THE NW $\frac{1}{4}$ OF SEC. 36 - T \ominus N; R. W.

BEG 1635.02' South + 1435.99' F. EAST. OF
N.W. CORNER OF THE NW $\frac{1}{4}$ & GO ON THE NORTH
R/L LINE OF I.C.R.R. + AT THE S.E. COR. OF LOT
#12 OF EASTON HGT. 2ND ADD

Z Y Y

$$\begin{array}{r}
 9925 \\
 -481 \\
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 9925
 \end{array}
 \qquad
 \begin{array}{r}
 477.40 \\
 .1227 \\
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 344180
 \end{array}$$

477.40

$$\begin{array}{r}
 997.98 \\
 -58.68 \\
 \hline
 1056.60
 \end{array}
 \quad
 \begin{array}{r}
 \times 1 \\
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 1056.60
 \end{array}$$

~~19400
39700
477.39 25~~

$$\begin{array}{r} \cancel{47740} \\ \underline{-59686} \end{array}$$

481,495

133
348
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481.00

485.10

89-60
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89-15

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1915-

10.3.6.4.9.15

10566

-1-45

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1056.7
999.5

~~52835~~

~~54803~~

~~54503~~

~~119251 165~~

pg. 632
EMMERI Bk. 108

Jesse F. Culver
Opal J. Culver

Part of Sec. Lot (187) bounded as follows, to wit: Beginning at a point six (6) rods east of the southwest corner of said sec. lot; thence east (190) feet and six (6) inches; thence north eight hundred ninety two (892) feet to the Pinemore Pike Road; thence southwest with said road (227) feet to a point six (6) rods east of the west line of said Sec. lot; thence south seven hundred six (706) feet to the place of beginning; the same being part of the Northeast quarter of sec. six (6) township eight (8) north, range one (1) West containing (4) acres, more or less;

also lots no. (13), (14), (15) and (16) in Emblick's Subdivision of a part of Sec. ~~Lot~~ lot (187) in the Northeast corner of the Southeast quarter of sec. six (6) township (8) North, range one (1) West.

Curtis Jackson
Emblick Lots 1, 2

Bk 103
Pg. 283

Lots numbers (1) and (2) in Emblick's Sub-
division being a part of Sec. Lot No.
(187) being a part of the Northeast quarter
of the Southeast quarter of sec. (6)
Township eight (8) North, Range one (1)
West, as shown in the plat of said sub-
division recorded in plat Book three (3)
pg. (29) of the Recorder's Bk. of Monroe
County.

Lot 17

Lot number (17) in Emblick's Subdivision
being a part of Sec. Lot 187 situated
in the Southeast quarter of sec. (6)
Township (8) North Range (1) West

TRACT #31

A part of the West Half of the Northwest Quarter of Section 11, T8N, R2W, in Monroe County, Indiana, beginning at a point that is 379.50 feet South and 275 feet East of the Northwest corner of the said West One Half of the said Northwest Quarter. Thence, running South for 125 feet; thence, running East for a distance of 202 feet; thence, running North for a distance of 125 feet; thence, running West for a distance of 202 feet and to the place of beginning, containing in all, 0.58 acres, more or less.

TRACT #32

A part of the West Half of the Northwest Quarter of Section 11, T8N, R2W, in Monroe County, Indiana, beginning at a point that is 504.5 feet South and 275 feet East of the Northwest corner of the said Northwest Quarter; Thence, running South for a distance of 100 feet; thence, running East for a distance of 202 feet; thence, running North for a distance of 100 feet; thence, running West for a distance of 202 feet and to the place of beginning. Containing in all 0.50 acres, more or less.

TRACT #33

A part of the West Half of the Northwest Quarter of Section 11, T8N, R2W, in Monroe County, Indiana, beginning at a point that is 604.5 feet South and 275 feet East of the Northwest corner of the said Northwest Quarter. Thence, running South for a distance of 100 feet; thence, running East for a distance of 202 feet; thence, running North for a distance of 100 feet; thence, running West for a distance of 202 feet and to the place of beginning, containing 0.50 acres, more or less.

TRACT #34

A part of the West Half of the Northwest Quarter of Section 11, T8N, R2W, in Monroe County, Indiana, beginning at a point that is 704.5 feet South and 275 feet East of the Northwest corner of the said Northwest Quarter. Thence, running South for a distance of 100 feet; thence, running East for a distance of 202 feet; thence, running North for a distance of 100 feet; thence, running West for a distance of 202 feet and to the place of beginning containing 0.50 acres, more or less.

TRACT #35

A part of the West Half of the Northwest Quarter of Section 11, T8N, R2W, in Monroe County, Indiana, beginning at a point that is 854.50 feet South and 275 feet East of the Northwest corner of the said Northwest Quarter. Thence, running South for a distance of 100 feet; thence, running East for a distance of 202 feet; thence, running North for a distance of 100 feet; thence, running West for a distance of 202 feet and to the place of beginning. Containing in all 0.50 acres, more or less.

TRACT #36

A part of the West Half of the Northwest Quarter of Section 11, T8N, R2W, in Monroe County, Indiana, beginning at a point that is 954.50 feet South and 275 feet East of the Northwest corner of the said Northwest Quarter. Thence, running South for a distance of 100 feet; thence, running East for a distance of 202 feet; thence, running North for a distance of 100 feet; thence, running West for a distance of 202 feet and to the place of beginning. Containing in all 0.50 acres, more or less.

TRACT #37

A part of the West Half of the Northwest Quarter of Section 11, T8N, R2W, in Monroe County, Indiana, beginning at a point that is 1054.5 feet South and 275 feet East of the Northwest corner of the said Northwest Quarter. Thence, running South for a distance of 100 feet; thence, running East for a distance of 202 feet; thence, running North for a distance of 100 feet; thence, running West for a distance of 202 feet and to the place of beginning. Containing in all 0.50 acres, more or less.

TRACT #38

A part of the West Half of the Northwest Quarter of Section 11, T8N, R2W, in Monroe County, Indiana, beginning at a point that is 1154.5 feet South and 275 feet East of the Northwest corner of the Northwest Quarter. Running thence South for a distance of 100 feet; thence, running East for a distance of 202 feet; thence, running North for a distance of 100 feet; thence running West for a distance of 202 feet and to the place of beginning. Containing in all 0.50 acres, more or less.

TRACT #39

A part of the West Half of the Northwest Quarter of Section 11, T8N, R2W, in Monroe County, Indiana, beginning at a point that is 1254.5 feet South and 275 feet East of the Northwest corner of the said Northwest Quarter. Running thence South for a distance of 100 feet; thence running East for a distance of 200 feet; thence, running North for a distance of 100 feet; thence, running West for a distance of 202 feet and to the place of beginning. Containing in all, 0.50 acres, more or less.

TRACT #40

A part of the West Half of the Northwest Quarter of Section 11, T8N, R2W, in Monroe County, Indiana, beginning at a point that is 1354.5 feet South and 275 feet East of the Northwest corner of the said Northwest Quarter. Running thence South for a distance of 100 feet; thence, running East for a distance of 202 feet; thence, running North for a distance of 100 feet; thence, running West for a distance of 202 feet and to the place of beginning. Containing in all 0.50 acres, more or less.

TRACT #41

A part of the West Half of the Northwest Quarter of Section 11, T8N, R2W, in Monroe County, Indiana, beginning at a point that is 1454.50 feet South and 275 feet East of the Northwest corner of the said Northwest Quarter. Thence, running South for a distance of 100 feet; thence, running East for a distance of 202 feet; thence, running North for a distance of 100 feet; thence, running West for a distance of 202 feet and to the place of beginning. Containing in all 0.50 acres, more or less.

TRACT # 42

A part of the West Half of the Northwest Quarter of Section 11, T8N, R2W, in Monroe County, Indiana, beginning at a point that is 1554.50 feet South and 275 feet East of the Northwest corner of the said Northwest Quarter. Running thence South for a distance of 100 feet; thence, running East for a distance of 202 feet; thence running North for a distance of 100 feet; thence, running West for a distance of 202 feet and to the place of beginning. Containing in all 0.50 acres, more or less..

TRACT #43

A part of the West Half of the Northwest Quarter of Section 11, T8N, R2W, in Monroe County, Indiana, beginning at a point that is 1654.50 feet South and 275 feet East of the Northwest corner of the said Northwest Quarter. Thence, running South for a distance of 100 feet; thence running East for a distance of 202 feet; thence, running North for a distance of 100 feet; thence, running West for a distance of 202 feet and to the place of beginning. Containing in all 0.50 acres, more or less.

TRACT #44

A part of the West Half of the Northwest Quarter of Section 11, T8N, R2W, in Monroe County, Indiana, beginning at a point that is 1754.50 feet South and 275 feet East of the Northwest corner of the said Northwest Quarter. Running, thence South 100 feet; thence, running East for a distance of 202 feet and to the centerline of a 50 foot street right of way projected South through the center line of a cul-de-sac having a diameter of 80 feet. Thence, running in a Northerly direction over and along the- West arc of the said

cul-de-sac for a distance of 99.66 feet. Thence, running North for a distance of 28 feet and to the Northeast corner of the said Tract No. 44; thence, running West for a distance of 202 feet and to the place of beginning. Containing in all 0.50 acres, more or less.

TRACT #45

A part of the West Half of the Northwest Quarter of Section 11, T8N, R2W, in Monroe County, Indiana, beginning at a point that is 1854.50 feet South and 729 feet East of the Northwest corner of the said Northwest Quarter. Thence, running West for a distance of 202 feet and to the centerline of a 50 foot street right-of-way projected South through a cul-de-sac having a diameter of 80 feet. Thence, running in a Northerly direction over and along the East line of the said cul-de-sac for a distance of 99.66 feet. Thence, running North for a distance of 28 feet and to the Northwest corner of said Tract No. 45; thence, running East for a distance of 202 feet; thence, running South for a distance of 100 feet and to the place of beginning. Containing in all 0.50 acres, more or less.

TRACT #46

A part of the West Half of the Northwest Quarter of Section 11, T8N, R2W, in Monroe County, Indiana, beginning at a point that is 1754.50 feet South and 729 feet East of the Northwest corner of the said Northwest Quarter. Running thence West for a distance of 202 feet; thence, running North for a distance of 100 feet; thence, running East for a distance of 202 feet; thence, running South for a distance of 100 feet and to the place of beginning. Containing in all 0.50 acres, more or less.

TRACT #47

A part of the West Half of the Northwest Quarter of Section 11, T8N, R2W, in Monroe County, Indiana, beginning at a point that is 1654.50 feet South and 729 feet East of the Northwest corner of the said Northwest Quarter. Thence, running West for a distance of 202 feet; thence, running North for a distance of 100 feet; thence, running East for a distance of 202 feet; thence, running South for a distance of 100 feet and to the place of beginning. Containing in all 0.50 acres, more or less.

TRACT #48

A part of the West Half of the Northwest Quarter of Section 11, T8N, R2W, in Monroe County, Indiana, beginning at a point that is 1554.50 feet South and 729 feet East of the Northwest corner of the said Northwest Quarter. Running thence West for a distance of 202 feet; thence, running North for a distance of 100 feet; thence, running East for a distance of 202 feet; thence, running South for a distance of 100 feet and to the place of beginning. Containing in all, 0.50 acres, more or less.

TRACT #49

A part of the West Half of the Northwest Quarter of Section 11, T8N, R2W, in Monroe County, Indiana, beginning at a point that is 1454.5 feet South and 729 feet East of the Northwest corner of the said Northwest Quarter. Thence, running West for a distance of 202 feet; thence, running North for a distance of 100 feet; thence, running East for a distance of 202 feet; thence, running South for a distance of 100 feet and to the place of beginning. Containing in all 0.50 acres, more or less.

TRACT #50

A part of the West Half of the Northwest Quarter of Section 11, T8N, R2W, in Monroe County, Indiana, beginning at a point that is 1354.50 feet South and 729 feet East of the Northwest corner of the said Northwest Quarter. Thence, running West for a distance of 202 feet; thence, running North for a distance of 100 feet; thence, running East for a distance of 202 feet; thence, running South for a distance of 100 feet and to the place of beginning. Containing in all 0.50 acres, more or less.

TRACT #51

A part of the West Half of the Northwest Quarter of Section 11, T8N, R2W, in Monroe County, Indiana, beginning at a point that is 1254.50 feet South and 729 feet East of the Northwest corner of the said Northwest Quarter. Thence, running West for a distance of 202 feet; thence, running North for a distance of 100 feet; thence running East for a distance of 202 feet; thence, running South for a distance of 100 feet and to the place of beginning. Containing in all 0.50 acres, more or less.

TRACT #52

A part of the West Half of the Northwest Quarter of Section 11, T8N, R2W, in Monroe County, Indiana, beginning at a point that is 1154.50 feet South and 729 feet East of the Northwest corner of the said Northwest Quarter. Thence, running West for a distance of 202 feet; thence, running North for a distance of 100 feet; thence, running East for a distance of 202 feet; thence, running South for a distance of 100 feet and to the place of beginning. Containing in all 0.50 acres, more or less.

TRACT #53

A part of the West Half of the Northwest Quarter of Section 11, T8N, R2W, in Monroe County, Indiana, beginning at a point that is 1054.50 feet South and 729 feet East of the Northwest corner of the said Northwest Quarter. Thence, running West for a distance of 202 feet; thence, running North for a distance of 100 feet; thence, running East for a distance of 202 feet; thence, running South for a distance of 100 feet and to the place of beginning. Containing in all 0.50 acres, more or less.

TRACT #54

A part of the West Half of the Northwest Quarter of Section 11, T8N, R2W, in Monroe County, Indiana, beginning at a point that is 954.5 feet South and 729 feet East of the Northwest corner of the said Northwest Quarter. Thence, running West for a distance of 202 feet; thence, running North for a distance of 100 feet; thence, running West for a distance of 202 feet; thence, running South for a distance of 100 feet and to the place of beginning, containing in all 0.50 acres, more or less.

TRACT #55

A part of the West Half of the Northwest Quarter of Section 11, T8N, R2W, in Monroe County, Indiana, beginning at a point that is 804.50 feet South and 729 feet East of the Northwest corner of the said Northwest Quarter. Thence, running West for a distance of 202 feet; thence, running North for a distance of 100 feet; thence, running East for a distance of 202 feet; thence, running South for a distance of 100 feet and to the place of beginning. Containing in all 0.50 acres, more or less.

TRACT # 56

A part of the West Half of the Northwest Quarter of Section 11, T8N, R2W, in Monroe County, Indiana, beginning at a point that is 704.50 feet South and 729 feet East of the Northwest corner of the said Northwest Quarter. Thence, running West for a distance of 202 feet; thence, running North for a distance of 100 feet; thence, running East for a distance of 202 feet; thence, running South for a distance of 100 feet and to the place of beginning. Containing in all 0.50 acres, more or less.

TRACT #57

A part of the West Half of the Northwest Quarter of Section 11, T8N, R2W, in Monroe County, Indiana, beginning at a point that is 604.50 feet South and 729 feet East of the Northwest corner of the said Northwest Quarter. Thence, running West for a distance of 202 feet; thence, running North for a distance of 100 feet; thence, running East for a distance of 202 feet; thence, running South for a distance of 100 feet and to the place of beginning. Containing in all 0.50 acres, more or less.

TRACT #58

A part of the West Half of the Northwest Quarter of Section 11, T8N, R2W, in Monroe County, Indiana, beginning at a point that is 504.50 feet South and 729 feet East of the Northwest corner of the Northwest Quarter. Thence, running West 202 feet; thence, running North for a distance of 100 feet; thence, running East for a distance of 202 feet; thence, running South for a distance of 100 feet and to the place of beginning. Containing in all 0.50 acres, more or less.

TRACT #31

A part of the West Half of the Northwest Quarter of Section 11, T8N, R2W, in Monroe County, Indiana, beginning at a point that is 379.50 feet South and 275 feet East of the Northwest corner of the said West One Half of the said Northwest Quarter. Thence, running South for 125 feet; thence, running East for a distance of 202 feet; thence, running North for a distance of 125 feet; thence, running West for a distance of 202 feet and to the place of beginning, containing in all, 0.58 acres, more or less.

TRACT #32

A part of the West Half of the Northwest Quarter of Section 11, T8N, R2W, in Monroe County, Indiana, beginning at a point that is 504.5 feet South and 275 feet East of the Northwest corner of the said Northwest Quarter; Thence, running South for a distance of 100 feet; thence, running East for a distance of 202 feet; thence, running North for a distance of 100 feet; thence, running West for a distance of 202 feet and to the place of beginning. Containing in all 0.50 acres, more or less.

TRACT #33

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TRACT #34

A part of the West Half of the Northwest Quarter of Section 11, T8N, R2W, in Monroe County, Indiana, beginning at a point that is 704.5 feet South and 275 feet East of the Northwest corner of the said Northwest Quarter. Thence, running South for a distance of 100 feet; thence, running East for a distance of 202 feet; thence, running North for a distance of 100 feet; thence, running West for a distance of 202 feet and to the place of beginning containing 0.50 acres, more or less.

TRACT #35

A part of the West Half of the Northwest Quarter of Section 11, T8N, R2W, in Monroe County, Indiana, beginning at a point that is 854.50 feet South and 275 feet East of the Northwest corner of the said Northwest Quarter. Thence, running South for a distance of 100 feet; thence, running East for a distance of 202 feet; thence, running North for a distance of 100 feet; thence, running West for a distance of 202 feet and to the place of beginning. Containing in all 0.50 acres, more or less.

TRACT #36

A part of the West Half of the Northwest Quarter of Section 11, T8N, R2W, in Monroe County, Indiana, beginning at a point that is 954.50 feet South and 275 feet East of the Northwest corner of the said Northwest Quarter. Thence, running South for a distance of 100 feet; thence, running East for a distance of 202 feet; thence, running North for a distance of 100 feet; thence, running West for a distance of 202 feet and to the place of beginning. Containing in all 0.50 acres, more or less.

TRACT #37

A part of the West Half of the Northwest Quarter of Section 11, T8N, R2W, in Monroe County, Indiana, beginning at a point that is 1054.5 feet South and 275 feet East of the Northwest corner of the said Northwest Quarter. Thence, running South for a distance of 100 feet; thence, running East for a distance of 202 feet; thence, running North for a distance of 100 feet; thence, running West for a distance of 202 feet and to the place of beginning. Containing in all 0.50 acres, more or less.

TRACT #38

A part of the West Half of the Northwest Quarter of Section 11, T8N, R2W, in Monroe County, Indiana, beginning at a point that is 1154.5 feet South and 275 feet East of the Northwest corner of the Northwest Quarter. Running thence South for a distance of 100 feet; thence, running East for a distance of 202 feet; thence, running North for a distance of 100 feet; thence running West for a distance of 202 feet and to the place of beginning. Containing in all 0.50 acres, more or less.

TRACT #39

A part of the West Half of the Northwest Quarter of Section 11, T8N, R2W, in Monroe County, Indiana, beginning at a point that is 1254.5 feet South and 275 feet East of the Northwest corner of the said Northwest Quarter. Running thence South for a distance of 100 feet; thence running East for a distance of 200 feet; thence, running North for a distance of 100 feet; thence, running West for a distance of 202 feet and to the place of beginning. Containing in all, 0.50 acres, more or less.

TRACT #40

A part of the West Half of the Northwest Quarter of Section 11, T8N, R2W, in Monroe County, Indiana, beginning at a point that is 1354.5 feet South and 275 feet East of the Northwest corner of the said Northwest Quarter. Running thence South for a distance of 100 feet; thence, running East for a distance of 202 feet; thence, running North for a distance of 100 feet; thence, running West for a distance of 202 feet and to the place of beginning. Containing in all 0.50 acres, more or less.

TRACT #41

A part of the West Half of the Northwest Quarter of Section 11, T8N, R2W, in Monroe County, Indiana, beginning at a point that is 1454.50 feet South and 275 feet East of the Northwest corner of the said Northwest Quarter. Thence, running South for a distance of 100 feet; thence, running East for a distance of 202 feet; thence, running North for a distance of 100 feet; thence, running West for a distance of 202 feet and to the place of beginning. Containing in all 0.50 acres, more or less.

TRACT # 42

A part of the West Half of the Northwest Quarter of Section 11, T8N, R2W, in Monroe County, Indiana, beginning at a point that is 1554.50 feet South and 275 feet East of the Northwest corner of the said Northwest Quarter. Running thence South for a distance of 100 feet; thence, running East for a distance of 202 feet; thence running North for a distance of 100 feet; thence, running West for a distance of 202 feet and to the place of beginning. Containing in all 0.50 acres, more or less.

TRACT #43

A part of the West Half of the Northwest Quarter of Section 11, T8N, R2W, in Monroe County, Indiana, beginning at a point that is 1654.50 feet South and 275 feet East of the Northwest corner of the said Northwest Quarter. Thence, running South for a distance of 100 feet; thence running East for a distance of 202 feet; thence, running North for a distance of 100 feet; thence, running West for a distance of 202 feet and to the place of beginning. Containing in all 0.50 acres, more or less.

TRACT #44

A part of the West Half of the Northwest Quarter of Section 11, T8N, R2W, in Monroe County, Indiana, beginning at a point that is 1754.50 feet South and 275 feet East of the Northwest corner of the said Northwest Quarter. Running, thence South 100 feet; thence, running East for a distance of 202 feet and to the centerline of a 50 foot street right of way projected South through the center line of a cul-de-sac having a diameter of 80 feet. Thence, running in a Northerly direction over and along the West arc of the said

cul-de-sac for a distance of 99.66 feet. Thence, running North for a distance of 28 feet and to the Northeast corner of the said Tract No. 44; thence, running West for a distance of 202 feet and to the place of beginning. Containing in all 0.50 acres, more or less.

TRACT #45

A part of the West Half of the Northwest Quarter of Section 11, T8N, R2W, in Monroe County, Indiana, beginning at a point that is 1854.50 feet South and 729 feet East of the Northwest corner of the said Northwest Quarter. Thence, running West for a distance of 202 feet and to the centerline of a 50 foot street right-of-way projected South through a cul-de-sac having a diameter of 80 feet. Thence, running in a Northerly direction over and along the East line of the said cul-de-sac for a distance of 99.66 feet. Thence, running North for a distance of 28 feet and to the Northwest corner of said Tract No. 45; thence, running East for a distance of 202 feet; thence, running South for a distance of 100 feet and to the place of beginning. Containing in all 0.50 acres, more or less.

TRACT #46

A part of the West Half of the Northwest Quarter of Section 11, T8N, R2W, in Monroe County, Indiana, beginning at a point that is 1754.50 feet South and 729 feet East of the Northwest corner of the said Northwest Quarter. Running thence West for a distance of 202 feet; thence, running North for a distance of 100 feet; thence, running East for a distance of 202 feet; thence, running South for a distance of 100 feet and to the place of beginning. Containing in all 0.50 acres, more or less.

TRACT #47

A part of the West Half of the Northwest Quarter of Section 11, T8N, R2W, in Monroe County, Indiana, beginning at a point that is 1654.50 feet South and 729 feet East of the Northwest corner of the said Northwest Quarter. Thence, running West for a distance of 202 feet; thence, running North for a distance of 100 feet; thence, running East for a distance of 202 feet; thence, running South for a distance of 100 feet and to the place of beginning. Containing in all 0.50 acres, more or less.

TRACT #48

A part of the West Half of the Northwest Quarter of Section 11, T8N, R2W, in Monroe County, Indiana, beginning at a point that is 1554.50 feet South and 729 feet East of the Northwest corner of the said Northwest Quarter. Running thence West for a distance of 202 feet; thence, running North for a distance of 100 feet; thence, running East for a distance of 202 feet; thence, running South for a distance of 100 feet and to the place of beginning. Containing in all, 0.50 acres, more or less.

TRACT #49

A part of the West Half of the Northwest Quarter of Section 11, T8N, R2W, in Monroe County, Indiana, beginning at a point that is 1454.5 feet South and 729 feet East of the Northwest corner of the said Northwest Quarter. Thence, running West for a distance of 202 feet; thence, running North for a distance of 100 feet; thence, running East for a distance of 202 feet; thence, running South for a distance of 100 feet and to the place of beginning. Containing in all 0.50 acres, more or less.

TRACT #50

A part of the West Half of the Northwest Quarter of Section 11, T8N, R2W, in Monroe County, Indiana, beginning at a point that is 1354.50 feet South and 729 feet East of the Northwest corner of the said Northwest Quarter. Thence, running West for a distance of 202 feet; thence, running North for a distance of 100 feet; thence, running East for a distance of 202 feet; thence, running South for a distance of 100 feet and to the place of beginning. Containing in all 0.50 acres, more or less.

TRACT #51

A part of the West Half of the Northwest Quarter of Section 11, T8N, R2W, in Monroe County, Indiana, beginning at a point that is 1254.50 feet South and 729 feet East of the Northwest corner of the said Northwest Quarter. Thence, running West for a distance of 202 feet; thence, running North for a distance of 100 feet; thence running East for a distance of 202 feet; thence, running South for a distance of 100 feet and to the place of beginning. Containing in all 0.50 acres, more or less.

TRACT #52

A part of the West Half of the Northwest Quarter of Section 11, T8N, R2W, in Monroe County, Indiana, beginning at a point that is 1154.50 feet South and 729 feet East of the Northwest corner of the said Northwest Quarter. Thence, running West for a distance of 202 feet; thence, running North for a distance of 100 feet; thence, running East for a distance of 202 feet; thence, running South for a distance of 100 feet and to the place of beginning. Containing in all 0.50 acres, more or less.

TRACT #53

A part of the West Half of the Northwest Quarter of Section 11, T8N, R2W, in Monroe County, Indiana, beginning at a point that is 1054.50 feet South and 729 feet East of the Northwest corner of the said Northwest Quarter. Thence, running West for a distance of 202 feet; thence, running North for a distance of 100 feet; thence, running East for a distance of 202 feet; thence, running South for a distance of 100 feet and to the place of beginning. Containing in all 0.50 acres, more or less.

TRACT #54

A part of the West Half of the Northwest Quarter of Section 11, T8N, R2W, in Monroe County, Indiana, beginning at a point that is 954.5 feet South and 729 feet East of the Northwest corner of the said Northwest Quarter. Thence, running West for a distance of 202 feet; thence, running North for a distance of 100 feet; thence, running West for a distance of 202 feet; thence, running South for a distance of 100 feet and to the place of beginning, containing in all 0.50 acres, more or less.

TRACT #55

A part of the West Half of the Northwest Quarter of Section 11, T8N, R2W, in Monroe County, Indiana, beginning at a point that is 804.50 feet South and 729 feet East of the Northwest corner of the said Northwest Quarter. Thence, running West for a distance of 202 feet; thence, running North for a distance of 100 feet; thence, running East for a distance of 202 feet; thence, running South for a distance of 100 feet and to the place of beginning. Containing in all 0.50 acres, more or less.

TRACT # 56

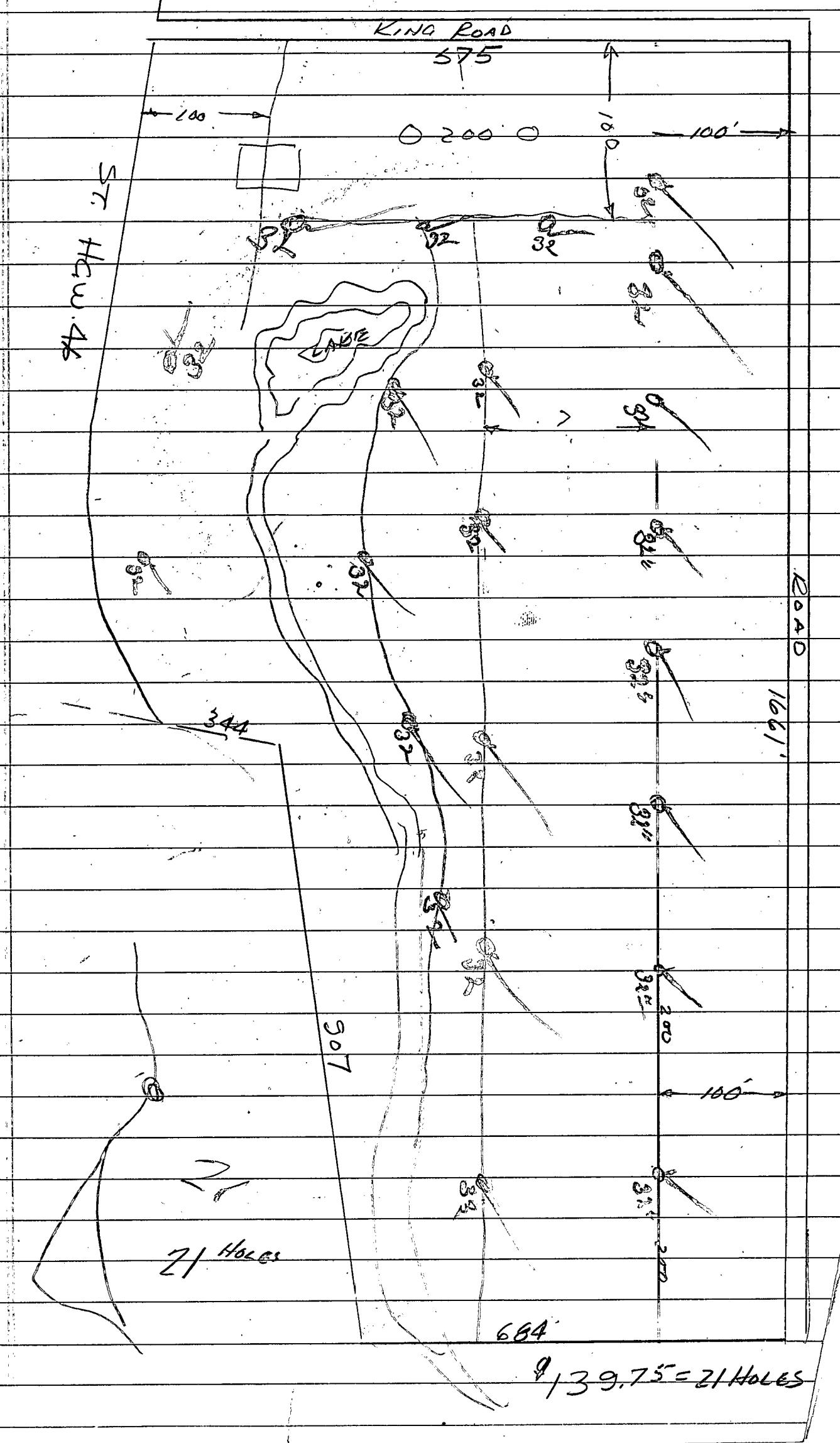
A part of the West Half of the Northwest Quarter of Section 11, T8N, R2W, in Monroe County, Indiana, beginning at a point that is 704.50 feet South and 729 feet East of the Northwest corner of the said Northwest Quarter. Thence, running West for a distance of 202 feet; thence, running North for a distance of 100 feet; thence, running East for a distance of 202 feet; thence, running South for a distance of 100 feet and to the place of beginning. Containing in all 0.50 acres, more or less.

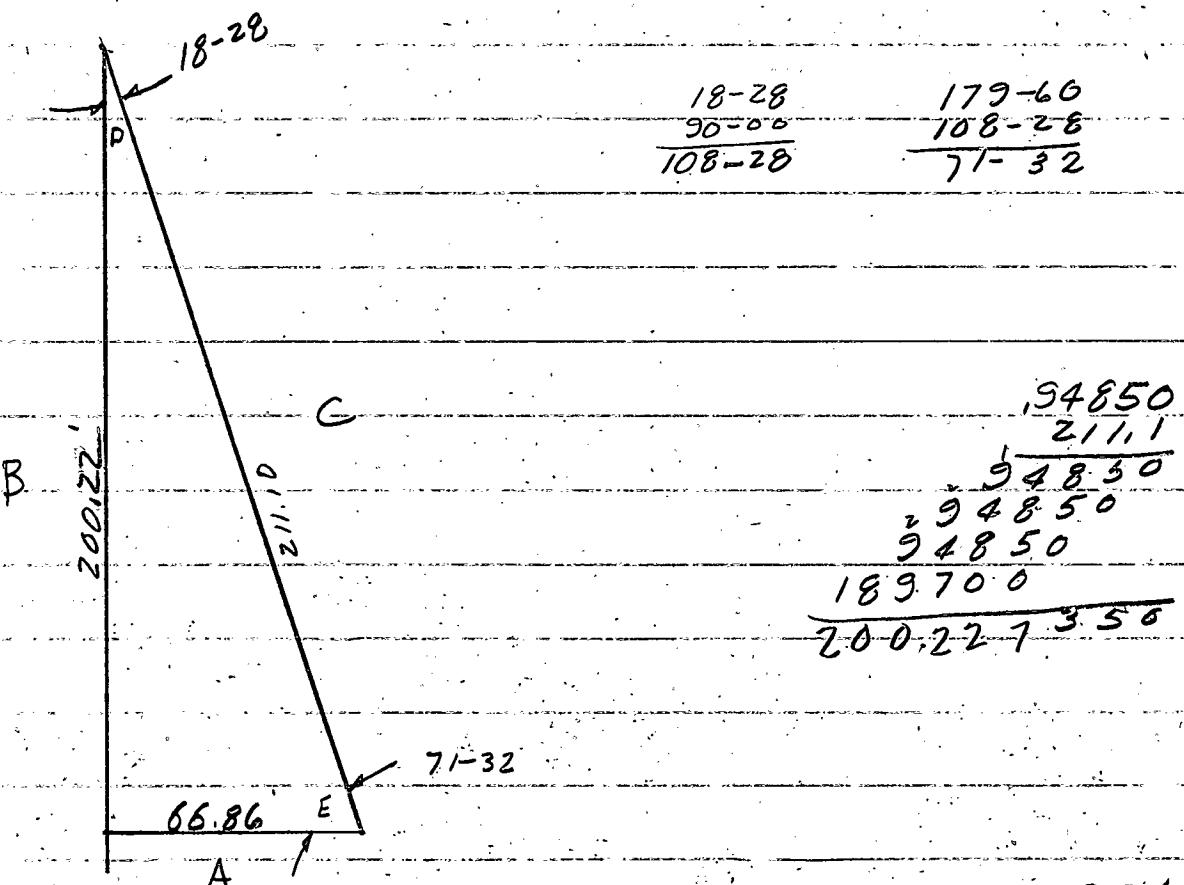
TRACT #57

A part of the West Half of the Northwest Quarter of Section 11, T8N, R2W, in Monroe County, Indiana, beginning at a point that is 604.50 feet South and 729 feet East of the Northwest corner of the said Northwest Quarter. Thence, running West for a distance of 202 feet; thence, running North for a distance of 100 feet; thence, running East for a distance of 202 feet; thence, running South for a distance of 100 feet and to the place of beginning. Containing in all 0.50 acres, more or less.

TRACT #58

A part of the West Half of the Northwest Quarter of Section 11, T8N, R2W, in Monroe County, Indiana, beginning at a point that is 504.50 feet South and 729 feet East of the Northwest corner of the Northwest Quarter. Thence, running West 202 feet; thence, running North for a distance of 100 feet; thence, running East for a distance of 202 feet; thence, running South for a distance of 100 feet and to the place of beginning. Containing in all 0.50 acres, more or less.





$$C \times \sin E = B$$

$$B \times \tan D = A$$

$$\begin{array}{r}
 33394 \\
 200.22 \\
 \hline
 66788 \\
 66788 \\
 \hline
 668614668
 \end{array}$$

A pt. of the SE 1/4 of Sec. 6-784, R1W A Beg @ pt
 re - 272.12 ft East + 533.28 ft North of the
 NW cor of the said SE 1/4; then running East
 for 199.78 ft; then running South for 18-18 1/2
 $\frac{66.86}{272.12}$
 for 211.10 ft; then running West 266.64 ft;
 then north running 180 ft for a distance of
 200.22 ft to the place of Beginning.
 $\frac{66.86}{199.78}$
 Count in all 1.¹⁰ Acres



PROPOSAL

PROJECT.....Bloomington, Indiana

ENGINEER.....

CONTRACTOR.....

TEX-VIT
MANUFACTURING DIVISION
P. O. BOX 340 • MINERAL WELLS, TEXAS

April 29, 1966

PROPOSAL

PROJECT.....Bloomington, Indiana.....

ENGINEER.....

CONTRACTOR.....

SPECIFICATIONS FOR
TEX-VIT
PUMP STATIONS

GENERAL

The contractor shall furnish and install one complete factory-built, automatic, underground pump station as manufactured by Process Equipment Division, CAN-TEX Industries, Inc., Mineral Wells, Texas, or equal, with all needed equipment factory installed and factory tested in a welded steel pump chamber with a welded steel entrance tube and with ladder to provide access. The principal items of equipment shall include two vertical, close-coupled, with flexible coupling, motor-driven non-clog sewage pumps; valves; internal piping; central control panel with circuit breakers; motor starters and automatic pumping level controllers; lighting; sump pump; motor-driven ventilator; dehumidifier and all internal wiring.

OPERATING CONDITIONS

Each pump shall be capable of delivering 125 GPM of raw unscreened sewage against a total dynamic head of 45 feet. The maximum allowable speed shall be 1150 RPM. The rated horsepower of each pump motor shall be 7 1/2. All openings and passages shall be large enough to permit the passage of a sphere 3" in diameter and any trash or stringy material which can pass through a 4" house collection system. The anticipated operating head range is from _____ feet minimum to _____ feet maximum.

PUMPS

The pumps shall be vertical, close-coupled, ball bearing, non-clog sewage pumps with 4" flanged discharge opening. The pumps shall be plain fitted and shall have a flexible coupling between the pump and motor.

The impeller shall be of the enclosed non-clog type with the forward ends of the blades generously rounded to avoid catching trash; the blades shall

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SPECIFICATIONS FOR
TEX-VIT
PUMP STATIONS

be tapered toward the periphery of the impeller so as to generate the maximum possible shut-off head; and the outer tips of the blades shall occupy only a negligible portion of the area of the impeller throat or periphery. The impeller shall be made of cast iron and accurately balanced before assembling in the pump.

The pump shall be supported by a cast iron pedestal base with openings large enough to permit access to the suction line and to the inspection opening in the suction elbow. The base shall be rugged enough to support the full weight of the pump, and shall be cast with a square footing to prevent the legs being broken in shipment. The legs of the pedestal shall be of such a length that the suction elbow of the pump will not touch the floor or level foundation upon which it stands. The suction elbow shall be of standard ASA dimensions and provided with a cleanout opening.

The casing shall be made of cast iron and shall be large enough at all points to pass any size of solid which can pass through the impeller. Handholes with removable covers shall be provided in the casing of all pumps 4" and larger for inspection purposes.

The backhead shall be removable and separate from the adaptor and stuffing box so that the backhead can be replaced when necessary without also having to replace adaptor and stuffing box.

The pump shaft shall run in ball bearings, one of which shall be of the radial type and one of the combined radial and thrust type. The bearings shall be grease lubricated and carefully sealed to exclude moisture and contaminants. The two pump bearings shall carry all radial and axial thrust of the pump, completely independent of the motor bearings.

The shaft shall be turned and ground to accurate dimensions from high grade alloy steel and furnished with Supard chrome stainless steel shaft sleeves. These sleeves shall protect the shaft through the stuffing box.

SPECIFICATIONS FOR
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The protecting sleeves shall be of 450 Brinnell hardness to resist abrasion and shall be renewable so that they can be replaced when necessary without replacing the whole shaft. Cartridge type stuffing boxes shall be furnished which will permit the use of conventional packing or mechanical seals. They shall be sufficiently deep to accommodate packing and a seal cage.

(A). ~~If packing is used, then it shall be lubricated by grease or water.~~

(B). If double mechanical seals are used, then clean sealing fluid under pressure shall be introduced between the seals. Adjustable shims shall be provided for adjusting clearance to compensate for wear between impeller and front head.

The pump Manufacturer shall have at least ten (10) years of experience in manufacturing pumps for this type of service.

MOTORS

The motors shall be vertical, shielded, drip-proof, squirrel cage induction motors, suitable for 3 phase, 60 cycle, 220 volt electric current. They shall have normal starting torque and low starting current characteristics. The motor shall not be overloaded beyond the name plate rating at the design head nor beyond the name plate rating plus the Manufacturer's service factor at any head in the operating range. The motor shaft shall be of adequate strength and stiffness for the service intended. It shall be supported on heavy grease lubricated ball bearings, one of which shall be a combination guide and thrust bearing and the other a guide bearing.

PUMP CHAMBER AND ENTRANCE TUBE

The station shall be built by the Manufacturer in two (2) major sections for ease in shipment and handling. These two sections shall be joined at the jobsite by welding. The field joint shall then be heavily coated with special epoxy supplied. The lower section shall be the pump chamber.

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SPECIFICATIONS FOR
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PUMP STATIONS

It shall contain all pumps and other equipment. The pump chamber shall be a vertical cylinder with the shell made from 1/4" or heavier structural grade steel plate rolled to have an outside diameter of 8 feet. The clear height inside from floor to ceiling shall be 7 feet, 1 1/2 inches. The top and bottom of the cylinder shall be of 3/8" thick structural grade steel plate with 2" high rolled flange on the side to overlap the shell. The pump chamber shall be reinforced on the bottom in both directions with 8" I beams weighing a minimum of 18.4 pounds per foot to stiffen it against hydrostatic uplift forces. Two of these I beams shall be parallel and shall be located beneath the suction lines and shall extend one foot on each end beyond the diameter of the pump chamber to act as skids and to protect the suction lines during shipment and installation. A third beam shall be provided perpendicular to the above two beams on the center line of the chamber. A 15" diameter by 8" deep sump with walls of 1/4" minimum thickness shall be provided in the position shown on the drawing. The pump chamber shall be reinforced on the top with 8" channels weighing a minimum of 13.75 pounds per foot, in both directions adequate to support the weight of the overburden, plus any surface traffic. A box sub-base shall be welded to the floor of the pump chamber for each pump. Sub-bases shall be made of 1/4" thick steel plate with projecting anchor bolts of suitable size. A lifting "eye", or "eyes", adequate for the entire weight of the complete chamber shall be provided close to the center, welded to one or more of the channels.

The upper section shall be the entrance tube with ladder and cover. It shall rest on the roof of the pump chamber which shall have a suitable matched opening to provide access. The tube shall be a vertical cylinder made from 1/4" structural steel plate rolled to 36" inside diameter. The length shall be adequate to place the cover above the surrounding ground and any anticipated local flooding. The entrance tube shall be stiffened at the bottom end by an angle 2" x 2" x 1/4" and at the top by a 1/2" thick bar rolled to match the outside of the tube and securely welded thereto. The outstanding leg of the bottom stiffener angle shall rest on a 3" x 3" x 1/4"

SPECIFICATIONS FOR
TEX-VIT
PUMP STATIONS

angle, shop welded to the roof of the main chamber, which angle shall stiffen and support the edge of the access opening. The field weld to join the two sections shall be at the outer diameter of the outstanding legs of these two angles to avoid damage to the interior finish paint.

A lifting "eye" shall be welded to the ceiling over each pump so a pulley or hoist can be attached for service work. Lifting lugs shall be provided on each section of the entrance for use during installation.

The cover for the entrance tube shall be of the spring-loaded, hinged type with a suitable drip lip around the edge and with handle for opening. It shall have a lock of the pin tumbler type which can be opened from the inside without a key. Additional ladder rungs shall be mounted on the underside of the cover to form an extension of the ladder when the cover is in the open position. A dependable mechanism which keeps the cover from blowing shut or closing under any normal load shall be provided.

The access ladder shall have rungs of 1" steel rods spaced on 12" centers from top to bottom and welded to the side rails. The section in the entrance tube shall be lined up accurately with the section in the pump chamber by self-aligning projections. Each section shall be supported by heavy steel plate brackets welded to the walls.

WELDING

All steel structural members shall be joined by electric arc welding with fillets of adequate section for the joint involved. Where required to exclude ground water such welds shall be continuous and water tight. All inserts for pipes, etc., shall be welded inside and out. Where the cast iron suction and discharge lines pass through the station walls, they shall be reinforced with 1/4" thick steel sleeves, welded inside and out, to the station walls. The space between the cast iron pipes and the steel sleeves shall be packed tight with expanding cement grout to prevent leakage.

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SPECIFICATIONS FOR
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PROTECTION AGAINST CORROSION

After welding, the entire pump chamber, entrance tube and cover assemblies shall be sand-blasted inside and out to prepare the surface by removing rust, mill scale, weld slag, etc. On all outside surfaces there shall be applied a 10 mil coating of epoxy paint prior to shipment. Any surfaces damaged in shipment shall be retouched with the same material during installation. All conduit and steel pipe shall be protected by one field coat of epoxy paint supplied. For cathodic protection, 2 packaged magnesium anodes shall be buried on opposite sides of the chamber and securely connected thereto by heavy copper wires in good electrical contact with the steel chamber. The inner surfaces of the pump station shall be attractively finished with three coats of high quality industrial grade aklyd enamel. A heavy synthetic rubber mat shall be installed on the floor in the normal walkway area to protect the steel floor from wear.

CONTROLS

To control the operation of the pumps corresponding with the variations of sewage levels in the wet well, an air bubbler system shall be provided complete with compressor, air storage tank, air flow meter, pressure regulator, wet well level gauge, and pressure switches for each pump. The air flow meter shall be calibrated to read in C. F. H. and shall be adjustable. The pressure switches shall be of the microswitch type and shall have independent "Start" and "Stop" adjustments for each pump. The compressor shall be mounted outside the control panel for ease in maintenance. An air tank of adequate capacity shall be furnished. An automatic alternator with manual disconnect switch shall be provided to reverse the sequence of operation on the completion of each pumping cycle. Provisions shall also be made for both pumps to operate in parallel should the level in the wet well continue to rise above the starting level for the low level pump. Thermal-magnetic circuit

SPECIFICATIONS FOR
TEX-VIT
PUMP STATIONS

breakers with dead fronts shall be provided, both as disconnect switches and over-load protection for each motor and each of the service circuits. Magnetic across-the-line starters shall have thermal overload heater coils in each phase to give positive protection against "single phasing". All of the above control equipment shall be mounted within a common NEMA I type enclosure. The circuit breaker switches, hand-off-automatic selector switches, alternator disconnect switch, and all accessory switches shall be grouped together in one centralized location on the panel front.

DEHUMIDIFIER AND VENTILATING BLOWER

A packaged dehumidifier assembly with hermetically-sealed Freon refrigeration type compressor, expansion coil fan and condenser coil shall be furnished to maintain the relative humidity of the air low enough to keep the electrical equipment dry and to prevent condensation on the walls. The dehumidifier shall handle 300 cubic feet of air per minute and shall be capable of removing 4 gallons of moisture per 24 hours. The dehumidifier shall be controlled automatically by an adjustable humidistat with a low temperature cut-out, which in turn, operates a heavy duty relay of adequate capacity for the dehumidifier motor. The dehumidifier shall be housed in a steel enclosure. The condensate shall be drained to the sump. An air inlet shall be provided to draw fresh air from the outside and discharge it directly into the entrance tube. A blower shall pick up air from within 18" of the floor and shall discharge it to the open air through a vent line of steel tubing. The blower shall be of the squirrel cage, high efficiency type of adequate capacity to change the air 30 times per hour. A manual and automatic switch shall be mounted on the side of the entrance tube for operation of the lights and blower. The vents shall have suitable covers and screens to prevent the entrance of rain, snow, rocks, rodents or other foreign material.

LIGHTS

Two light fixtures with heavy glass guards over the bulbs shall be installed on the ceiling of the pump chamber. They shall be controlled by a switch as described above.

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SUMP PUMP

Installed in the sump shall be a submersible sump pump with 1/3 HP motor mounted directly above the impeller. It shall have a minimum capacity of 1000 GPH at 20' TDH. The pump shall be controlled automatically by a float switch capable of operation on a 4" differential water level. It shall discharge back into the wet well through a 1 1/4" schedule 40 steel pipe with two (2) check valves and a gate valve with the pump chamber. The pipe shall enter the wet well at as high an elevation as practical. An enclosure of 1/4" heavy steel mesh shall surround the sump and the sump pump to keep out debris.

PIPING

Pump suction lines shall be 4 inch, Class 150 cast iron pipe with mechanical joint bell outside the pump chamber and with bronze fitted double disc gate valve inside the chamber. The discharge line shall be 4 inch, Class 150 cast iron pipe from the pump to the junction of the common discharge outlet. Bronze fitted check and double disc gate valves shall be installed in each pump discharge line. The check valves shall be of the spring-loaded lever type so the clapper can be lifted to back flush the pump and suction line. The discharge outlet shall be 4 inch, Class 150 cast iron pipe with a mechanical joint bell just outside the pump chamber.

The air line shall be 1/4" steel pipe inside the station. An angle bracket shall be welded to the outside of the chamber just over the air pipe connection to receive a 3" x 3" x 1/4" angle brace to protect the air pipe. A 3/4" pipe coupling shall be welded into the shell to receive the external bubbler pipe.

WIRING

The pump station shall be completely wired at the factory except for the power feeder lines in accordance with the National Electric Code. All wiring in the pump station shall be color coded as indicated on the wiring diagram.

SPECIFICATIONS FOR
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All wiring outside the panel shall be in conduit except for 110-volt accessory items which are provided with connecting insulated cable by the Manufacturer. Surface duct from the control panel across the ceiling and up the entrance tube shall be provided by the Manufacturer to receive the feeder lines. The surface duct shall terminate in a threaded conduit connection through the wall of the entrance tube above the ground level. Such small accessory items as the sump pump, blower, dehumidifier and air compressor shall be plugged into polarized grounded convenient outlets located near their installed position so that such items can be readily removed and serviced or exchanged for replacement units if necessary.

FACTORY TESTS

The completed pump station shall be given a running test of all equipment at the factory to check for excessive vibration, for leaks in all piping, for correct operation of the automatic control system and of all auxiliary equipment. The pump suction and discharge lines shall be coupled to a reservoir and the pumps shall re-circulate the water, simulating actual service conditions. The automatic control shall be adjusted under such operating conditions to start and stop the pumps at approximately the levels required by the job conditions.

WORKMANSHIP

All workmanship and materials throughout shall be of the highest quality.

MANUFACTURER

These specifications describe a factory-built lift station as manufactured by Process Equipment Division, CAN-TEX Industries, Inc. of Mineral Wells, Texas. A factory-built lift station of other manufacture of equal design, equipment and materials may be offered. To receive consideration on any alternate, full descriptive material must be submitted to the engineer at least seven (7) days before the scheduled letting to allow sufficient time for the issuance of addenda.

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SPECIFICATIONS FOR
TEX-VIT
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GUARANTEE

The Manufacturer of the lift station shall guarantee for one year from the date of shipment that the structure and all equipment shall be free from defects in design, materials and workmanship. The lift station Manufacturer shall furnish replacement parts for any component proven defective, whether of his or other manufacture during the guarantee period, excepting only those items which are normally consumed in service, such as light bulbs, oil, grease, packing, etc.

MANUFACTURED EQUIPMENT

In these specifications are specified certain equipment and materials deemed most suitable for the service anticipated. This is not done, however, to eliminate others equally as good and efficient. The contractor shall prepare his bid on the basis of the particular equipment and materials specified for the purpose of determining the low bid. The awarding of the contract shall constitute a contractual obligation to furnish the specified equipment and materials unless the contractor desires to follow the following procedure:

After the execution of the contract, substitution of equipment of makes other than those named in the contract will be considered for one reason only: That the equipment proposed for substitution is superior or equal in construction and/or efficiency to that named in the contract.

In the event the contractor obtains the engineer's approval on equipment other than that for which the plant was originally laid out, the contractor shall, at his own expense, make any changes in the structures, buildings or piping necessary to accommodate the equipment.

It will be assumed that the cost to the contractor of the equipment proposed to be substituted is less than the equipment named in the contract and if the substitution is approved, the contract price shall be reduced by an amount equal to the savings.

INSTALLATION INSTRUCTIONS FOR
TEX-VIT
LIFT STATIONS

A TEX-VIT lift station is a complete factory-built unit. These units are ready to operate and include all of the equipment required to insure years of trouble-free operation. All of these units are factory-tested and are shipped only after thorough inspection.

By carefully reading these instructions before you begin work, you will find that these units can be installed at a very minimum of expense. Failure to follow these instructions could easily result in errors in installation that would cost a considerable amount of money to correct. The following recommendations are for your guidance:

EXCAVATION AND CONCRETE

To avoid any undue expenses that could be caused by inclement weather and local ground conditions, excavation and concrete work should not be attempted until the station has been delivered. The factory will advise you about two (2) weeks before delivery is to be made. At the end of this time, the factory will again check with you to insure that you are ready before delivery is actually made.

The concrete pad should be poured as shown on the plans and rough finished, making sure the finished surface is level.

WET WELL

Normally, the wet well is built prior to the installation of the pump station. If the inlet manhole is of concrete construction, blockouts should be left for insertion of the various pipes after the station is in place. If the inlet manhole is of brick construction, it is normally easier to knock out the required openings after the station is in place. In either instance, these openings can be filled in with concrete after the pipes are in place.

INSTALLING LIFT STATION

TEX-VIT lift stations are delivered to the jobsite on our trucks. You must furnish a crane or other method of unloading. The approximate weight of the station is shown on the drawing. Lifting "eyes" are provided on the top of the station and the sides of the entrance tube for ease in unloading and installing. Correct slings should be used to prevent damage to station when lifting. After the station is in place on the concrete pad, it should be securely anchored by the anchor bolts in the slab. Use tilt blocks that are provided under the ends of the I-beams farthest from the wet well to provide floor slope necessary to drain any water that may enter the station to the sump. Tilt blocks are not to be used on stations without I-beams.

The inlet and discharge lines terminate immediately outside the station shell, with fittings as specified. Cast iron inlet lines are recommended

to help prevent trouble caused by settlement of backfill. The inlet line (s) must have a continuous slope from the wet well to the station proper (as shown on the plans) as this is a gravity-fed unit and airlocking will occur if the inlet line(s) settle or do not have proper slope. CAUTION: DO NOT TURN SEWAGE INTO STATION UNTIL YOU HAVE STUDIED INITIAL OPERATION INSTRUCTIONS.

After the inlet line (s) are installed, the wet well invert should be built as shown on the plans. All fittings in the discharge line or force main should be properly tied or blocked to prevent dislocation by hydraulic pressure.

You must furnish and install the required amount of $1 \frac{1}{4}$ " galvanized pipe to complete the sump pump discharge line as shown on the plans.

You must furnish and install the required amount of $\frac{3}{4}$ " galvanized pipe to complete the air bubbler line or air exhaust as shown on the plans.

Both the sump pump line and air bubbler or air vent line should enter the wet well at an elevation that is as high as possible yet is still buried deep enough to prevent freezing. There are couplings welded in the side of the station for field jointing. Care should be taken to insure that these lines are not damaged during backfilling.

LIFT STATION ANCHORAGE

A. (Applicable for Stations with I-beams support)

After lift station is in place on the concrete pad, it should be securely anchored by the following method: Pour concrete on top of the pad, between the I-beams, forcing it beneath the station as far as possible. The concrete should be poured to the top of the I-beams all the way to the outer ends. In addition, reinforcing rods should project from the base pad and be bent over and welded to the I-beams at the time of installation. (Anchor bolts may be used if preferred).

B. (Applicable for stations without I-beam support)

After lift station is in place on the concrete pad, it should be anchored by the following method: Holes (4 or more) are provided in the base to receive anchors. The anchor bolts should be located as shown on the plans. Concrete can then be poured around the station to a point just below the inlet line if desired.

ENTRANCE TUBE (not applicable for all stations)

Before placing the entrance tube in place, untie the rubber-covered cord in the air vent line and lower it through the air vent of the preceding entrance tube section. This cord can now be reached through the access cover in the vent line within the station proper. The cord should be pulled through the slot provided and plugged into the receptacle adjacent to the vent line. This cord is for operation of the ventilating blower and lights. Entrance tube lifting lugs provided should be used to set entrance tube sections in place.

WELDING (Applicable for stations in two or more sections)

Be sure ladder, vent lines, and conduit are properly aligned. At the same time, care should be taken to make sure entrance tube sections are centered. Now you will note that joining may be accomplished by welding the connecting flanges on the outside together with a water-tight down hand weld. Two (2) passes should be made. First, a stringer bead; and secondly, a final cover bead. After welding, welds must be slagged and wire brushed down to bare metal. With exterior paint provided, paint each weld two or three coats, allowing drying time between each coat. CAUTION: Do not mix more paint than necessary, as the paint sets up within forty-five minutes to one hour after catalyst is added. Inside the entrance tube, it will be noted that smoke from welding has penetrated between the connecting flanges. This should be removed by using a water and solax mixture. This is normally only smoke and not burn damage, however, interior paint is provided for touch up if necessary.

ELECTRICAL

CAUTION: DO NOT ATTEMPT ANY ELECTRICAL CONNECTIONS UNTIL YOU HAVE CAREFULLY STUDIED ALL OF THIS SECTION.

To avoid any delays you should get in touch with the Power Company and advise them that you will need power for total horsepower of motors plus approximately two horsepower for accessories.

This station requires 17 HP, 3 Phase, 60 Cycle, 220 Volt, 4 wire service. IMPORTANT: If this type power is not available, call the factory immediately so that the wiring in the station may be changed to suit.

The electrician must furnish and install proper size service switch, meter loop, conduit and wire from service pole to station panel (see chart for proper size). All underground connections in service conduit must be water-tight. Be sure all circuit breakers, H-O-A switches, etc., both within and without the control panel are turned "OFF". After all conduit is in place and wire is pulled, connect L1 Black, L2 Red, L3 Blue, (this is the high leg). Incoming lines must be phased out. DO NOT ATTEMPT TO CHANGE ROTATION OF MOTORS UNTIL YOU STUDY INITIAL OPERATING INSTRUCTIONS CAREFULLY.

PROTECTION AGAINST CORROSION

Tex-Vit Stations are shipped with finish coats of special paint inside and out. To insure long life, we again point out that all steel pipe and scratched surfaces on the outside must be heavily coated before backfilling. Cans of this paint material are shipped with each station.

Magnesium anodes are shipped with the station. These anodes have lead wires that must be connected to the solderless connectors installed on the lifting lugs on the side of the station. The anodes should be placed in the backfill at about the vertical mid-point of the station. They should be a minimum of 5 to 6 feet out from the station shell. After connecting the anode wires, the solderless connectors should be coated with the outside paint supplied.

BACKFILLING

The utmost care should be exercised when backfilling to avoid damage to the station surface, anodes, wiring, piping, etc. Whenever possible, sand should be used as backfill material to insure good compaction. Failure to get good compaction usually results in broken inlet and discharge lines.

INITIAL OPERATING INSTRUCTIONS
TEX-VIT
LIFT STATIONS

Your TEX-VIT station was carefully tested and inspected before shipment. Before attempting to start this unit, carefully inspect it for any damage that may have occurred in transit, unloading, setting, etc.

1. TEX-VIT lift stations are designed to pass any solid that will normally pass through the house service lines; however, they are not designed to handle boards, rocks, bricks, etc.

Carefully check the wet well and influent sewer lines to insure that all foreign material has been removed. If there is any doubt, install a temporary bar screen across the inlet line(s) for the first few days of operation.

2. Before applying power to the unit, check to be sure that correct power has been brought into the station and that the high leg (blue wire) is connected to the proper terminal. If the high leg is improperly connected, you will burn out or damage all of the 110-volt circuits and accessories.
3. Be sure all circuit breakers, H-O-A switches, etc., both within and without the control panel, are turned "OFF".
4. Turn "ON" the main line disconnect switch at the power pole.
5. Turn "ON" the transformer circuit breaker (left hand side of panel), if used. (Transformers are only used on stations having three-wire, three-phase service).
6. Turn "ON" the circuit breaker for the lights and blower. Lights and blower should come "ON" if entrance tube cover is open.
7. Go to the top of the entrance tube and pull the cover closed. Lights and blower should go "OFF".
8. With cover closed, throw the toggle switch alongside the ladder rail, lights and blower should come "ON". Turn switch off and raise cover. Lights and blower should again come "ON".
9. Turn "ON" the sump pump circuit breaker. Fill sump with water. The float has been adjusted to start the pump when water is approximately two (2) inches from the top of the sump. BE SURE GATE VALVE in the sump pump discharge line is OPEN. The sump pump may have to be primed. Should the position of the float need to be changed, this can be done by moving the collars on the float rod.

10. Turn "ON" the dehumidifier circuit breaker. The dehumidifier may or may not come "on". If the unit does not come on, note that a thermostat and humidistat are located on the left hand side of the control panel. These are preset at the factory to run if the temperature is above 65° and the relative humidity is above 55%.

If the relative humidity is below 55%, the unit will not run and the humidistat will have to run down to existing humidity. After checking, reset these controls to their original positions. (If the unit goes bad within five (5) years, your local dealer or TEX-VIT will exchange the unit at no cost to you.) After the station is in operation for a few days, check for moisture present within the station. The controls may be lowered slightly to keep the station dry, if moisture is present.

PUMP STATIONS

11. A. Check drain cock located near the bottom of the air storage tank to be sure it is closed.

B. Turn "ON" the air compressor circuit breaker. Air compressor will start; allow it to build up pressure until it shuts off. Check air lines for leaks.

C. Gauge atop the pressure regulator should read 5 to 7 PSI. This indicates reduced pressure and must not be changed.

D. The air purge meter should indicate a flow of air and should read not more than one C.F.H..

E. Allow time for air to completely fill the lines.

F. If there is water in the wet well, the first (left hand) switch will trip at an indicated two (2) feet on the well well gauge. The second switch will trip at three (3) feet. These are standard factory settings unless specifications indicate other settings. If the wet well is full, both switches will be "ON". See attached pressure switch data sheet for description.

11- 1. If it becomes necessary to change the settings due to field conditions, see the instruction sheet on adjustment of TEX-VIT diaphragm operated pressure switches.

11- 2. Open suction and discharge gate valves. Check all bolts and flanges for leaks that may have developed in transit.

11- 3. If the stuffing boxes on gates and checks leak excessively, this is caused by drying out of the packing and should be tightened only enough to stop leaks. Do not attempt to adjust pump stuffing box packing until pump is running.

11 - 4 You will note there is a petcock on the top of each pump volute. Be sure the water in the wet well is above pump volutes; then open each petcock until all air is bled off and the volute is filled with liquid. If the pumps have mechanical seals lubricated by pressurized water.

to the stuffing box; it is imperative that the filter and seal box be full of water before the pumps are turned on. On the box opposite the water inlet, you will note a small petcock. Open each petcock until the box is full of water; then close the cock.

- 11 - 5 Turn "ON" control circuit breaker.
- 11 - 6 Turn "ON" both pump circuit breakers.
- 11 - 7 Turn each H-O-A switch on the hand position momentarily (enough to make pumps rotate) and check for correct rotation of each unit. Each unit should turn toward the discharge on the volute. Normally the unit on the left is clockwise rotation and the other is counter-clockwise. If rotations are wrong (if wrong on one - it will be wrong on both), then you must turn both circuit breakers "OFF" and switch L1 and L2 leads at the main disconnect switch on the power pole. DO NOT CHANGE L3, the high leg (blue wire). After changing these, again check rotation as outlined above.
- 11 - 8 Turn "ON" the alternator disconnect breaker.
- 11 - 9 Turn H-O-A switches to the automatic position. If wet well is full, both pumps will now operate.
- 11 - 10 Check pump stuffing boxes with pumps running for excessive leakage and adjust to finger tight if required. Stuffing box should leak slightly. If mechanical seals are being used, they may, under some conditions, have a small amount of leakage. If leaks do not stop, or if excessive leakage is noted, DO NOT operate the pump, as permanent damage may be done to the seal. In such cases, contact your local TEX-VIT agent or call the factory direct.
- 11-11 Any abnormal noise or vibration calls for immediate attention. If the pump has excessive vibration, it may be caused by:
 - A. Foreign object in the impeller.
 - B. Partially plugged suction (mud or construction debris in wet well).
 - C. Cavitation.
 - D. The following procedure will usually determine the cause:
 - A. Note check valve arms to determine if both are opening approximately the same amount. If not, the offending pump can be noted.
 - B. Gradually close the discharge gate valve on the offending pump. If closing the valve partially stops the vibration or noise, it is an indication of cavitation due to plugged suction or discharge head too low. Cavitation of this nature is the result of the pump pumping more than the designed capacity caused by the fact that the head is not that which was specified. This usually happens on new

systems until the force main is filled and normal or specified head is established.

C. Cavitation can also be caused by full or partial plugging of the suction line, which causes starving of the impeller. If suction lines are clear and vibration does not stop, this indicates a foreign object is lodged in the impeller or has passed through the impeller, damaging it.

11-12 To check the pump proper, close all inlet and discharge gate valves. Remove the handhole on the side of the pump, catching the water in a pail. The impeller may now be seen with the aid of a flashlight. The pump can be rotated by turning the flexible coupling by hand. DO NOT put your hand into the pump unless all motor breakers are turned off.

Keep drain lines for pumps clean. This will prevent sewage accumulation in the pump backhead and overflowing.

Periodically check the wet well levels. If the level has changed from the original setting, it is possible that the spring tension in the pressure switches has changed and must be reset. Instruction sheet is included.

Lubricate pumps and motors in accordance with manufacturer's instructions. DO NOT OVER GREASE.

Check the packing glands for excessive leakage. When repacking, ALWAYS replace all of the packing, both above and below the lantern ring. DO NOT replace the top rings only.

If greasers for packing are used, they should be checked and filled periodically. If mechanical seals are used, refer to Manufacturer's instructions in this manual when replacement is necessary.

BUBBLER COMPRESSOR

Do not attempt to lubricate any part of the compressor as motor bearings are grease packed and sealed for lifetime service. The intake air filter must be cleaned periodically. Never operate the compressor without a filter. When replacing filter, use felt or flannel, as other material will damage valves. The air storage tank must be drained periodically to remove accumulated moisture that may have formed within the tank. A drain cock is provided in the bottom of the tank for this purpose.

CAUTION: If the station is not due to go into service immediately, do the following:

- A. Close inlet gate valve (s).
- B. Close discharge gate valve (s).
- C. Turn motor circuit breaker (s) "OFF".
- D. Turn H-O-A switch (es) "OFF".
- E. Leave all other breakers "ON".
- F. Leave outside disconnect switch on power pole turned "ON".

CAUTION: Failure to leave sump pump "ON" could result in station flooding.

INITIAL OPERATING INSTRUCTIONS

PNEUMATIC EJECTOR STATIONS

12 - 1 CAUTION

- A. The crankcases of the compressor(s) were drained before shipping. Before starting the compressor(s), be sure to fill crankcases to full mark on bayonet oil gauge. Oil level must be maintained between two marks on gauge. Type of oil depends on operating conditions and ambient temperatures at points of installation. For proper type and grade of oil, refer to Maintenance Manual.
- B. Some compressors are supplied with automatic lubricators. These lubricators give automatic lubrication having visible oil cup feeds that supply the correct amount of oil when compressor is running and automatically shuts off when compressor stops. Be sure the lubricator(s) are filled.

12 - 2 Turn "ON" control, alternator and compressor circuit breakers.

12 - 3 Turn H-O-A switch(es) on "hand" position momentarily (enough to make compressor(s) rotate) and check for correct rotation. If rotation is reversed, turn motor circuit breaker "off" and switch L1 and L2 leads at the main disconnect switch on the power pole. DO NOT CHANGE L3, the high leg, (blue wire) after changing above. Then again check rotation as outlined above.

Direct Empty Units (No air storage tank)

13.

- A. Open discharge gate valve (s).
- B. Open inlet gate valve (s).
- C. As the receiver (s) are filling, check for leaks.
- D. The level will rise in the receiver until it makes contact with the short electrode completing a circuit which energizes the motor starter and closes the two-way air valve allowing the compressor to build up sufficient pressure to eject the contents of the receiver. The motor and compressor will operate for a pre-determined time to complete ejection. The motor will then shut off and the two-way air valve will open to vent the pot. If the station is a duplex unit (2 pots), the controls will be interlocked allowing only one receiver to eject at a time.

Units With An Air Storage Tank

14.

- A. Turn the H-O-A switch(es) "ON". The compressor(s) will come on and build up pressure in the air storage tank. The compressor(s) will start and stop at approximately the settings shown on the plans. All duplex units will have two compressors.

- B. After compressor(s) has turned off, check the entire unit for air leaks that may have developed in transit due to vibration.
- C. Open discharge gate valve.
- D. Open inlet gate valve.
- E. As the sewage receiver is filling, check for leaks.
- F. The sewage will rise in the receiver(s) until it makes contact with the short electrode in one pot, completing a circuit which causes the three-way air valve to close the vent line to atmosphere and introduce air under pressure from the air storage tank to the sewage receiver. If this does not happen, press the "test button" on the control panel. This grounds the circuit just as though the receiver were full and the three-way valve should shift. Release the "test button". Unit will stay energized for approximately 30 seconds. If the station is a duplex unit, the same cycle will occur with the second receiver. Controls are interlocked, allowing only one receiver to eject at a time.

15. Be sure to clean the station thoroughly before asking for final inspection as the station, when clean, will have a pleasing appearance. Small cans of each color of paint with brushes were furnished to touch-up any scratches that may have occurred during installation.

CAUTION: If the station is not due to go into service immediately, do the following:

- A. Close inlet gate valve(s).
- B. Eject the receiver by pushing "test button"
- C. Close discharge gate valve(s).
- D. Turn motor circuit breaker(s) "OFF".
- E. Turn H-O-A switch(es) "OFF".
- F. Leave all other breakers "ON".
- G. Leave outside disconnect switch on power pole turned "ON".

CAUTION: Failure to leave sump pump "ON" could result in station flooding.

GENERAL OPERATION AND MAINTENANCE

GOOD HOUSEKEEPING in a lift station helps provide a trouble-free station. Keep your station clean and painted. Small cans of paint with brushes for each color were furnished with the station at the time of shipment. When additional paint is required, contact the factory for prices.

The sump pump should be checked occasionally by lifting the float to be sure that it is operative. Remove any accumulated debris from the sump or sump screen.

Keep drain lines for dehumidifier clean. This will prevent condensate accumulating in the dehumidifier and overflowing.

Check the dehumidifier to determine if it is working. Check for condensation on the walls of the station. If condensation is noted, reset the humidistat at a slightly lower setting. If the coils of the dehumidifier are frozen or frosted, turn unit off until it defrosts; then slightly raise the setting on the thermostat and turn unit on again.

Periodically check the sewage level in the inlet manhole. The design capacity of the unit is such that, except during peak flow periods, the level should be below the invert of the influent lines. If the level is too high, the unit should be checked thoroughly. If nothing is apparently wrong with the operation, there is a possibility that the flow is in excess of the original design capacity. This possibility should be investigated since continuous operation at excessive flow rates will result in undue wear and maintenance.

BLOWER

Do not attempt to lubricate any part of the blower as the motor bearings are grease-packed and sealed for lifetime service.

DEHUMIDIFIER

Do not attempt to lubricate any part of this unit as the compressor is a hermetically-sealed Freon unit.

Fairbanks Morse

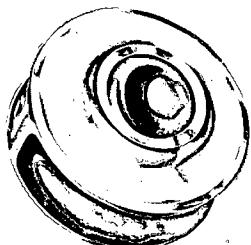
model 5430B

VERTICAL BUILTOGETHER
NON-CLOG PUMP

SEWAGE • PACKING WASTES
SLURRIES • DRAINAGE
FOODS • PULP AND PAPER

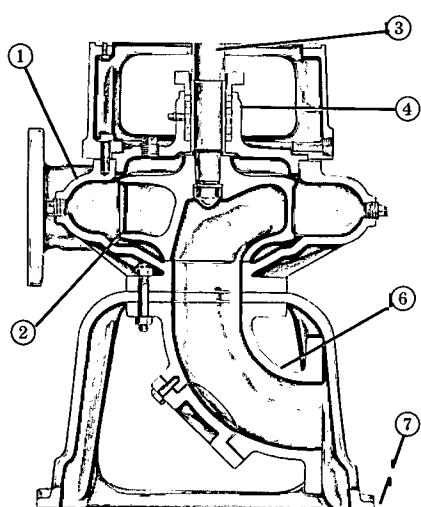
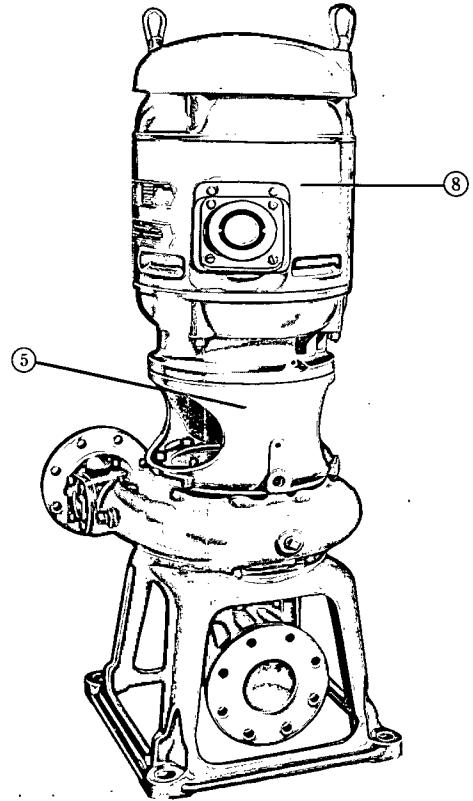
specifications

1. CASING—high strength cast iron with specially-designed waterways . . . provides unobstructed flow for any solid that can be passed by the impeller. All pumps have handholes for inspection and clean-out.
2. IMPELLER—Unique, enclosed non-clog type, cast in one piece and specifically designed to pass large solids and unscreened liquids. Clearance between rotating and stationary parts is adjustable to provide sustained performance. The impeller is supplied with a taper-bore for quick removal.
3. SHAFT—turned and ground to accurate dimensions from high-grade alloy steel, furnished with corrosion and wear resistant 450 Brinell Supard stainless sleeves through the stuffing box.
4. STUFFING BOX—may be fitted with conventional packing with split glands or a variety of mechanical seals. This construction simplifies field changeover from packing to seals and vice-versa.
5. ADAPTOR—cast iron, with extra large access openings to the stuffing box for adjustment or renewal of packing or seals. The adaptor has accurately machined centering fits at both ends to assure correct alignment. A wide choice of adaptors permits matching the power requirements of the pump to the driving assembly.
6. SUCTION ELBOW—matches American Standard flanged fitting dimensions. Available either as a constant diameter or increaser elbow. Bolted inspection covers, conforming to elbow contour, are of standard construction to permit ease in cleaning pump and suction pipe.
7. BASE—entire pump is supported by a rugged one piece cast base with reinforced machined lugs for bolting to the foundation, and machined surfaces to assure a rugged installation.
8. MOTOR—vertical, solid shaft design custom manufactured for Fairbanks Morse. Available in weather proof, totally-enclosed, fan cooled or explosion proof construction.



THE FAMOUS FAIRBANKS MORSE BLADELESS IMPELLER

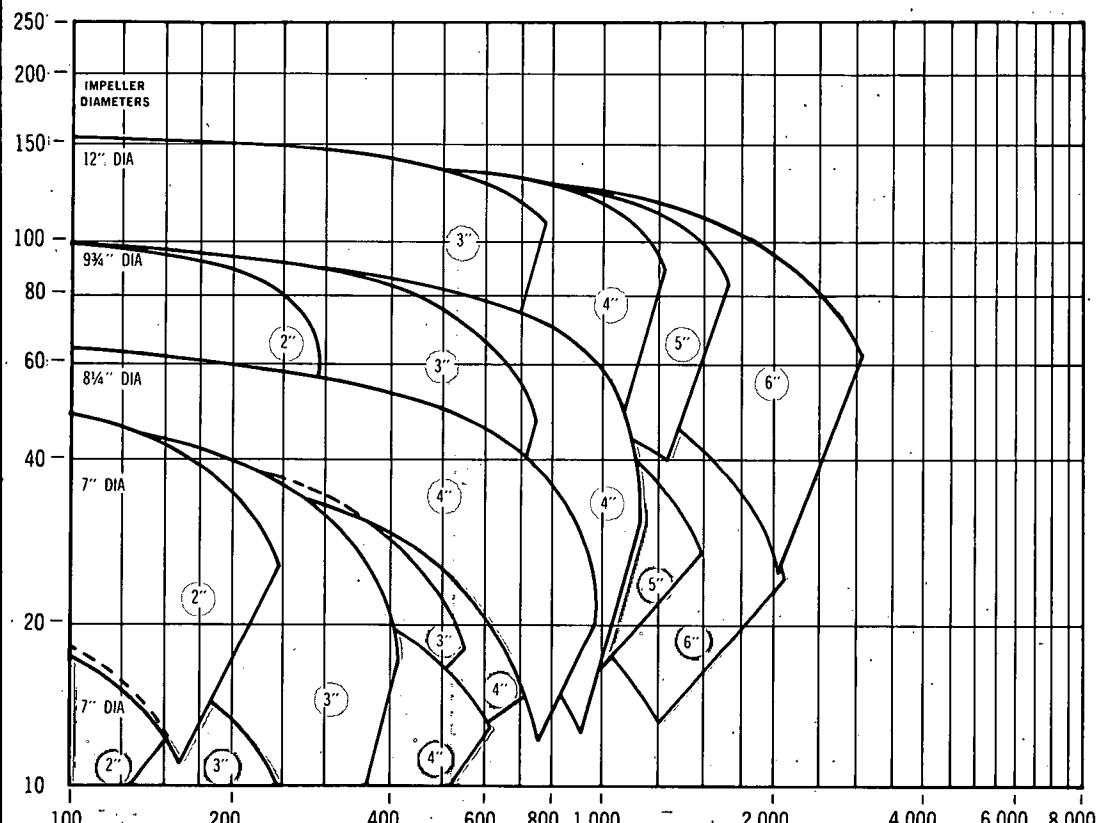
handles 10 to 25 times more fibrous trash than conventional impellers. Perfected balancing techniques and standardization permit easy substitution of the bladeless impeller in conventional Fairbanks Morse trash pumps with no alterations to station piping, drive shafting or setting. Available at extra cost on pumps through 5-inch diameter.



FAIRBANKS MORSE MODEL 5430B

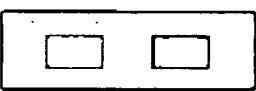
performance

TOTAL DYNAMIC HEAD IN FEET



CAPACITY IN U.S. GALLONS PER MINUTE

RPM
KEY



1750 1150

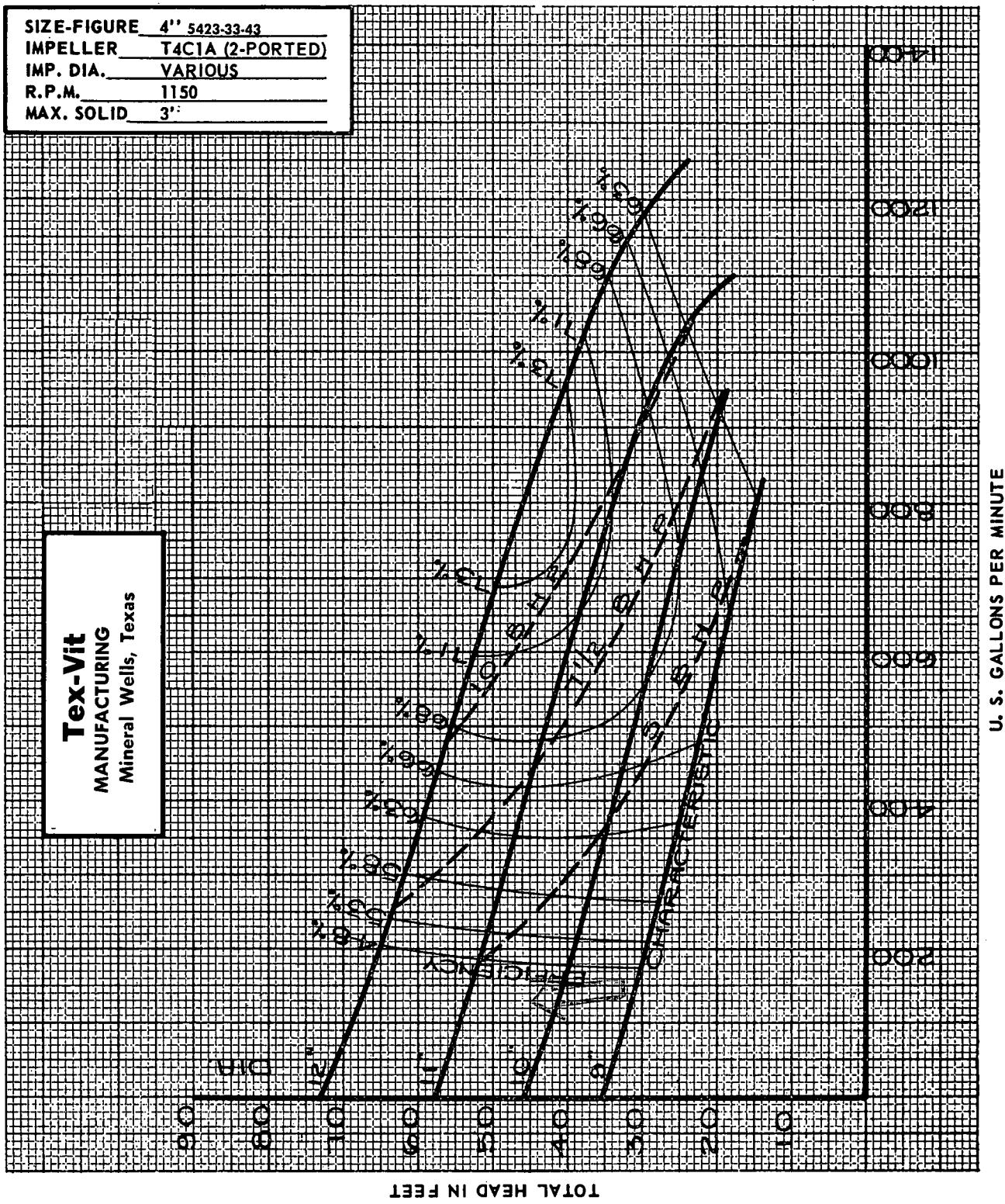
Colt Industries



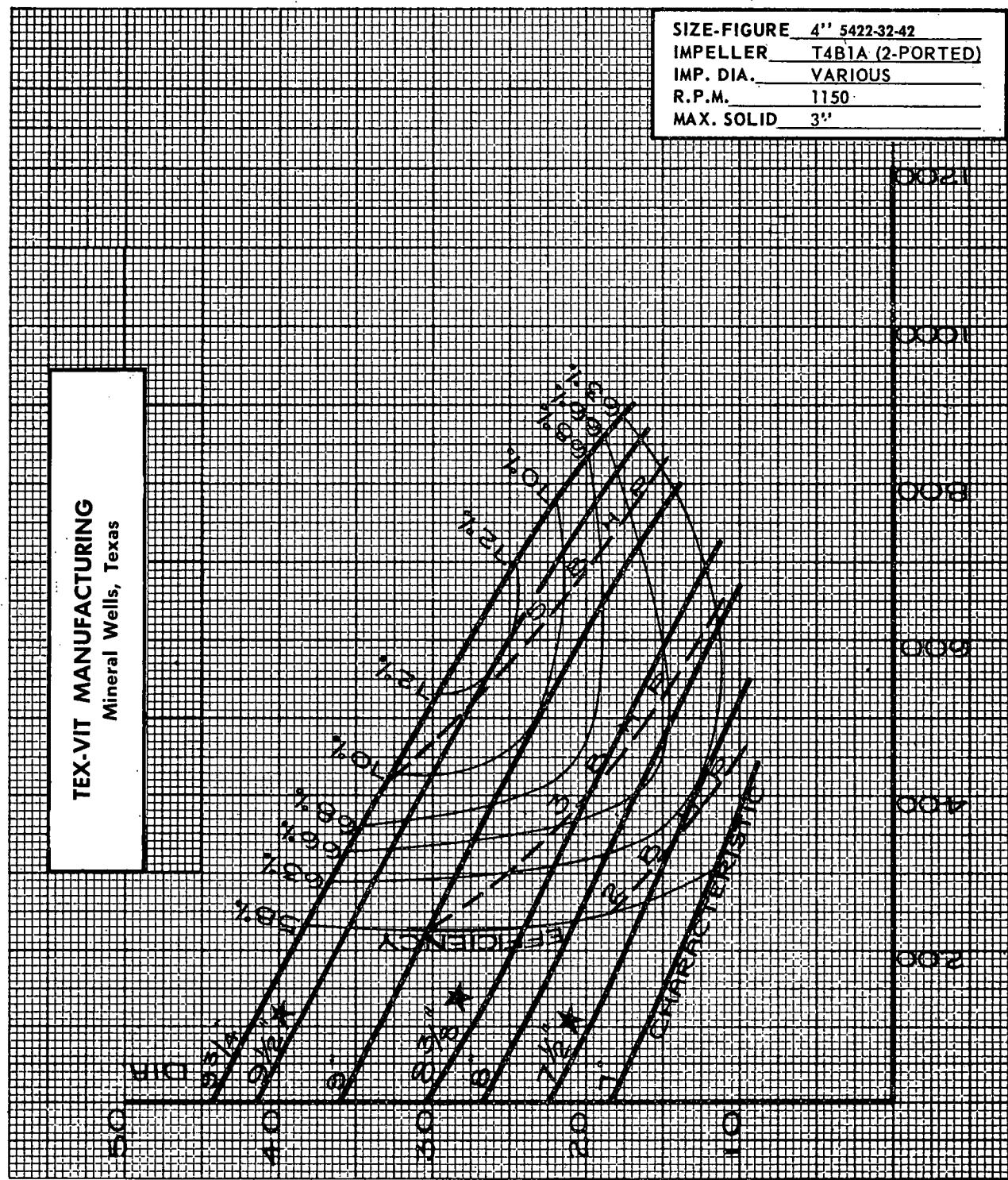
Fairbanks Morse Pump Division

3601 KANSAS AVENUE • KANSAS CITY, KANSAS 66110

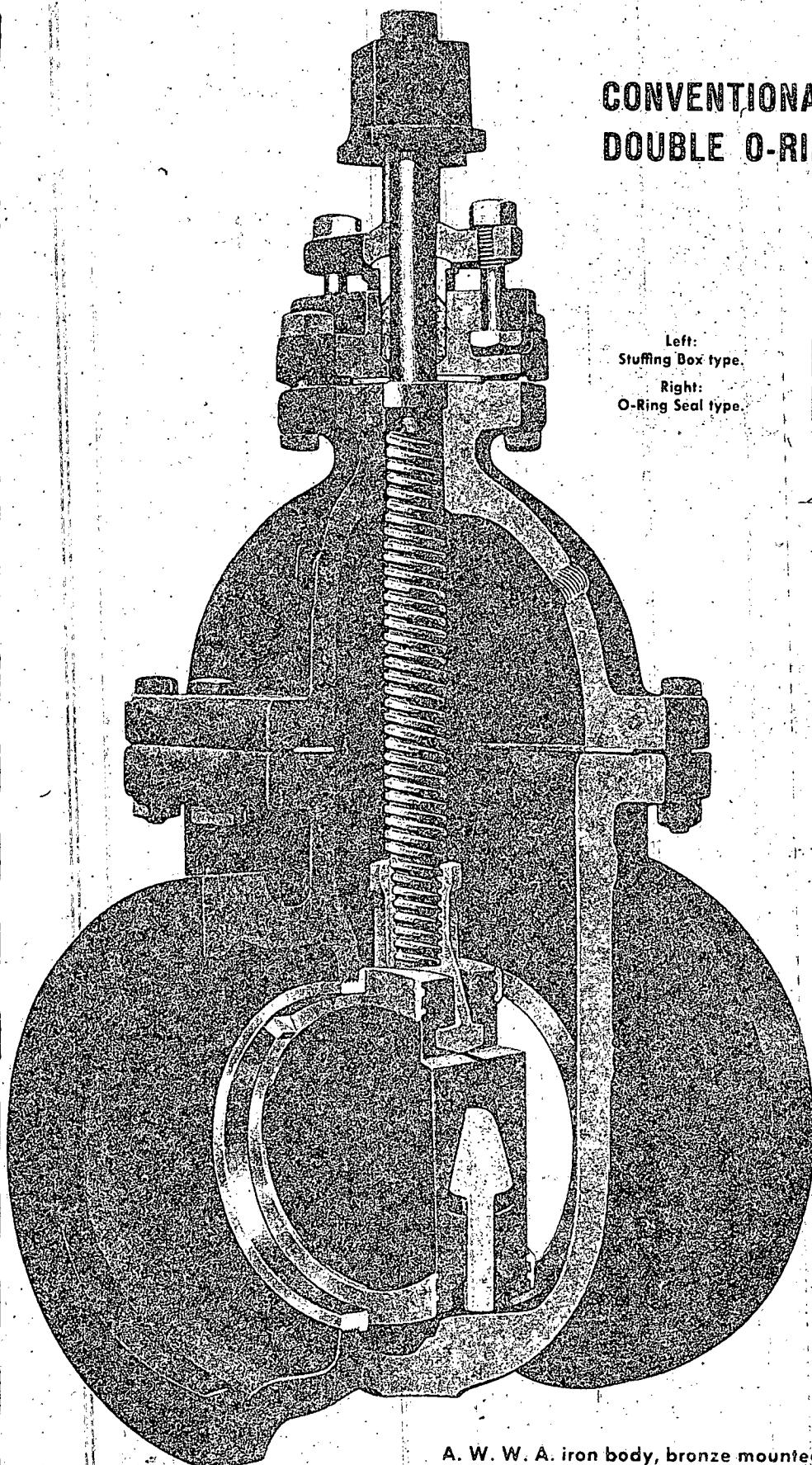
PERFORMANCE CHART



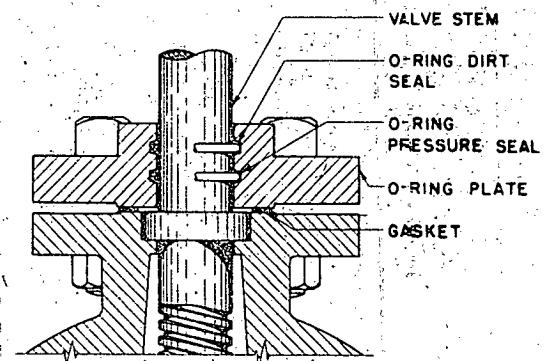
PERFORMANCE CHART



CONVENTIONAL PACKING or with DOUBLE O-RING SEAL PLATE



Left:
Stuffing Box type.
Right:
O-Ring Seal type.



"M & H NRS gate valves, AWWA, Class "C," are furnished with o-ring stem seals as shown above or with stuffing box and packing as shown at left.

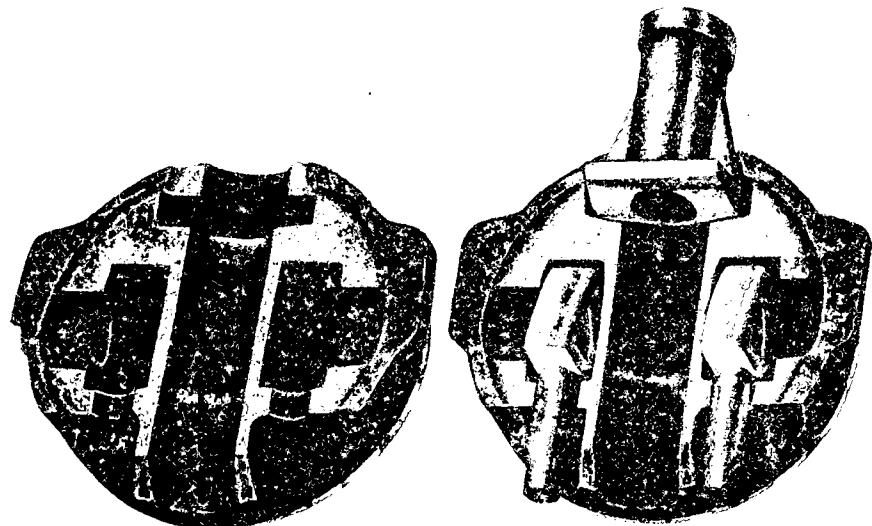
The o-ring seal plate embraces two molded rubber o-rings, one of which acts as a pressure seal and the other as a dirt seal. This o-ring seal design is leak-proof and requires little or no maintenance. Both rings are specially compounded rubber which does not deteriorate, however, if it should become necessary, replacement of the o-rings is an easy operation. An important feature of this design provides for the o-ring groove machined into the seal plate and not into the stem.

This design has become so popular within the waterworks field that we have adopted it as our standard. We particularly recommend use for underground services. Bronze-lined seal plates or all bronze seal plates are available when so ordered.

The older conventional-type stuffing box gland is bronze with cast iron follower in sizes 3"-12" and cast iron bronze-bushed in sizes 14" and larger."

A. W. W. A. iron body, bronze mounted, double disc, parallel seat.
2"-12"—200 lbs. working pressure, 350 lbs. hydrostatic test.
14"-42"—150 lbs. working pressure, 300 lbs. hydrostatic test.
(Also available in Classes A and B for 50 lbs. and 100 lbs. working pressures, and Class 250 for higher pressures.)

Figure 67—Hub Ends.



Inside view of Gate Assembly showing 3 spreaders.

RUGGEDLY DESIGNED DISCS with DIRECT-ACTING DISC SPREADERS

The simplicity of design and rugged construction of the gate assembly in M&H Valves are widely recognized as outstanding features. The double-disc gate assembly has only 5 parts: 2 bronze-faced discs; 1 combination bronze stem-nut and spreader, and 2 direct-acting bronze spreaders or wedges, as shown above.

When the valve in vertical position is opened, the stem-nut-spreader eases immediately and the two bottom spreaders release simultaneously, thus allowing the discs to move away laterally from the seats and the entire gate assembly to move upward easily and without scraping. When the valve is closed, the stem-nut-spreader action is reversed as the two bottom spreaders contact the bosses located at the bottom of the valve body, thus pressing the discs laterally against the seats without scraping. Each spreader acts independently of the other to open or seat the gate discs from three separate and distinct contact points at the top and sides. There is no sliding action of the discs on the seat. This design is equally effective for valves installed in a horizontal position. In M&H Square Bottom Valve design, the travel of the gate in opening and closing is further controlled by bronze shoes, located on either side of each disc, which ride stainless steel tracks located on either side of the body. Additional bonnet tracks provide an accurate bearing at that point and are usually of bronze.

M & H VALVE and FITTINGS COMPANY
ANNISTON, ALABAMA

Points of Superiority

- Double-disc mechanism works equally well with pressure against either side of the discs.
- Stem nut permits stem to operate discs without the stem binding, springing or bending out of alignment.
- In operating valve, discs move laterally away from seats BEFORE upward motion starts. In closing, the lateral motion wedges the discs against seats AFTER downward motion stops. Thus M&H valves operate without dragging the gate discs across the seat rings at any point. This results in easy operation.
- When closed, discs are wedged laterally against seats with pressure exerted from three separate points to form a perfect leak-proof seat. The spreaders function independently of each other.
- Valves may be re-packed while under pressure, either in closed or open positions.
- Bronze parts are extremely liberal in size and cross section. Wider faced seat and disc rings are important features.

Other Features

- Valve designed and manufactured in accordance with latest specifications of American Water Works Association. Iron body, bronze mounted. High factor of safety. Cast iron used in accordance with A.S.T.M. Specification A-126, Class B, having 31,000 psi tensile strength. Bronze Spreaders, Stem Nuts, Body Rings, Gland and Bonnet Bushings in accordance with A.S.T.M. Specification B-52, having 30,000 psi tensile strength. Stems are of manganese bronze, A.S.T.M. B-132, Classes A or B, 60,000-80,000 lbs. tensile strength. Special bronze available where required to meet extraordinary water conditions.
- All standard types of end connections are available on M&H valves, including Hub, Flanged, Mechanical Joint, Screwed, Universal, Ring-Tite, Fluid-Tite, and Concrete.
- Accessories include gearing, by-passes, double square-bottom; rollers, tracks and scrapers; hydraulic and motor operation, indicators, clean-outs, chain wheels; floor stands; extension stems, etc.
- M&H Class C, A. W. W. A. valves can be supplied in solid wedge type instead of double disc, if so desired.



SWING CHECK VALVES

STANDARD

• INCREASING

• PLAIN

LEVER AND WEIGHT
LEVER AND SPRING

• IRON BODY

BRONZE MOUNTED
FULL OPENING

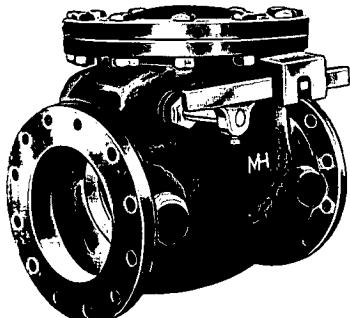
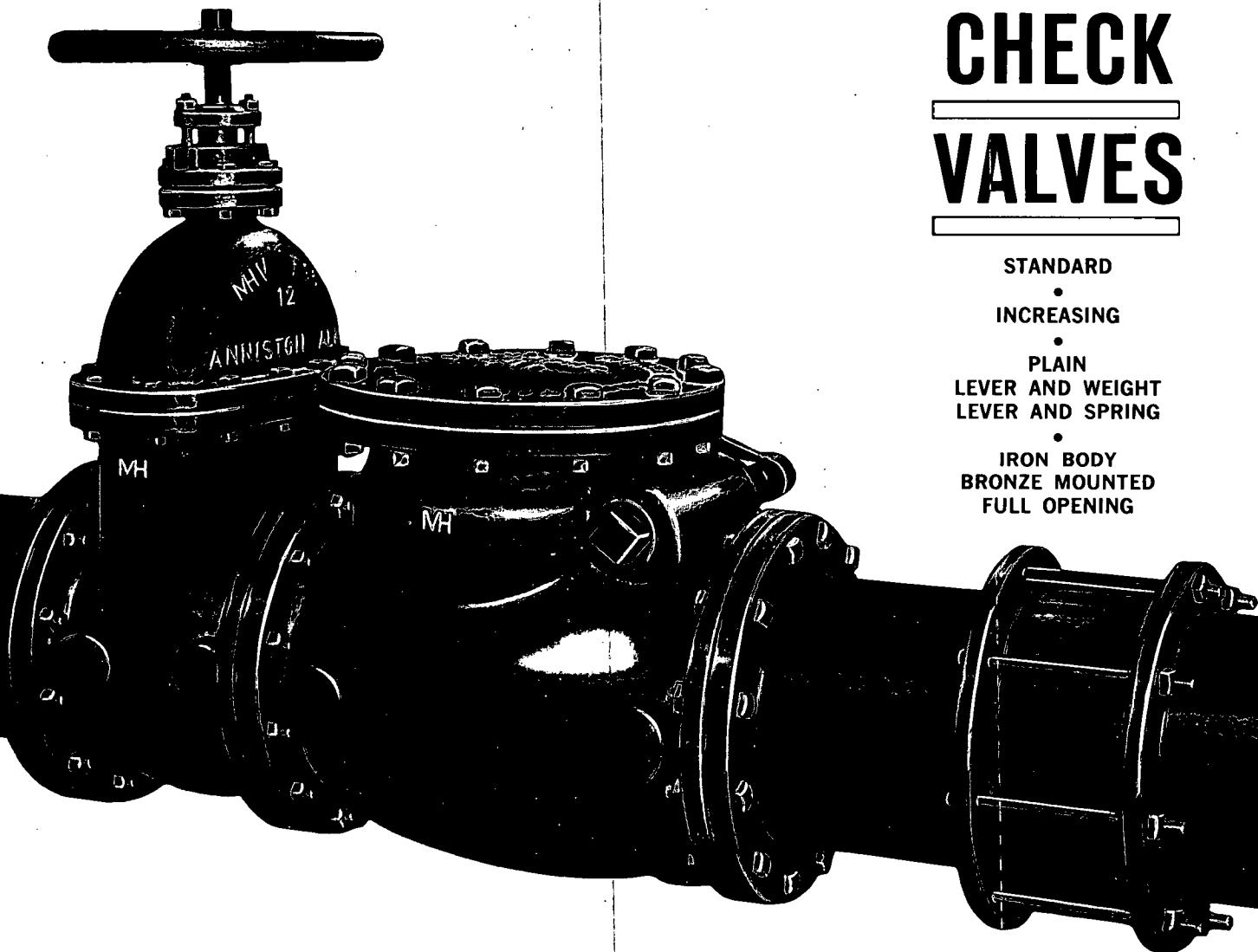


Figure 50—Flanged end with Lever and Weight.

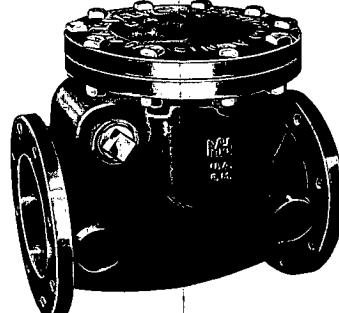


Figure 60—Flanged end, Plain.

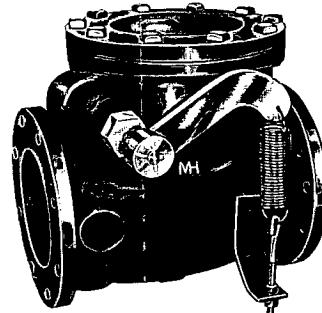
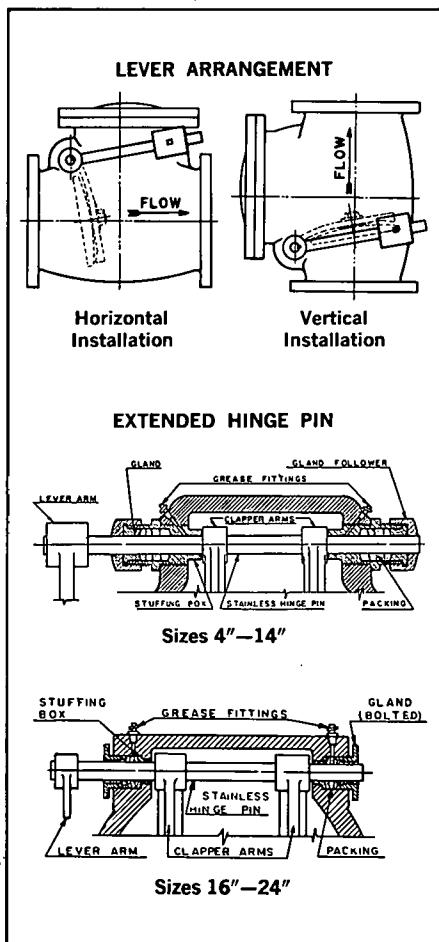


Figure 60-SL—Flanged end with Lever and Spring.

MH

FULL OPENING—HIGH FLOW EFFICIENCY



M&H Swing Check Valves are an important product in the M&H line of valves, popular with engineers and operating personnel. They are well proportioned and sturdily constructed.

The valve clapper swings completely clear of the waterway when the valve opens, permitting a "full flow" through the valve equal to the nominal diameter of the pipe. The clapper operates freely and opens or closes in accordance with the line pressure. Clappers for valves 5" and larger are cast iron, bronze-faced. Sizes 2" through 16" are available with rubber-faced clappers.

Four types of M&H Check Valves are manufactured: (1) Plain Swing Check Valve which operates by line pressure, closing when line pressure drops or reverses direction, (2) outside lever and weight and (3) outside spring and lever. (The latter two types are desirable for quicker closing and for elimination of slamming under conditions of rapid flow reversal.) The other type (4) is the Increasing, which is available plain or with lever and weight or spring and lever.

Either lever-and-weight or outside spring-and-lever designs should be used for vertical installation. Lever-and-weight type check valves for horizontal installation require the lever arm parallel to the run of the pipe and the weight on the downstream side of the clapper for quick and quiet closing. The arm can be reversed 180 degrees to assist in opening when minimum pressures are encountered. For vertical installation, the lever arm is moved to a position parallel to the clapper seat and extend-

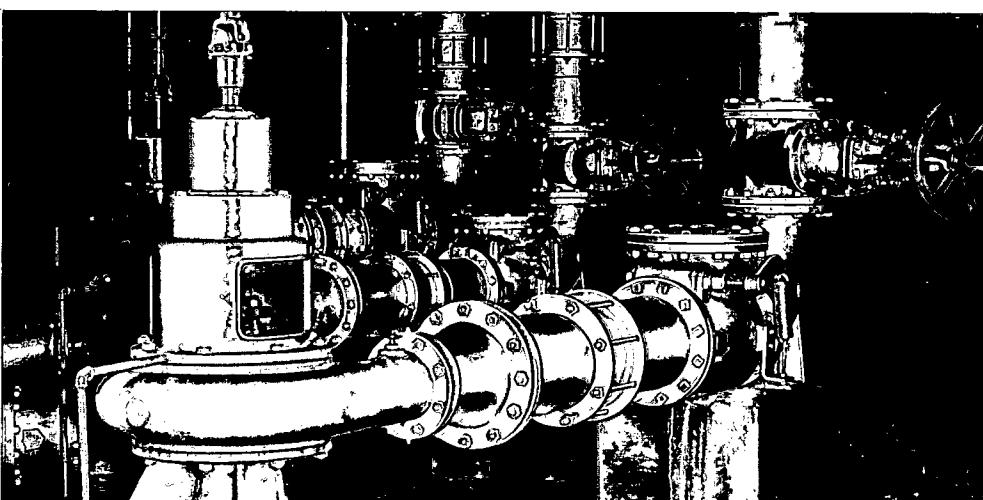
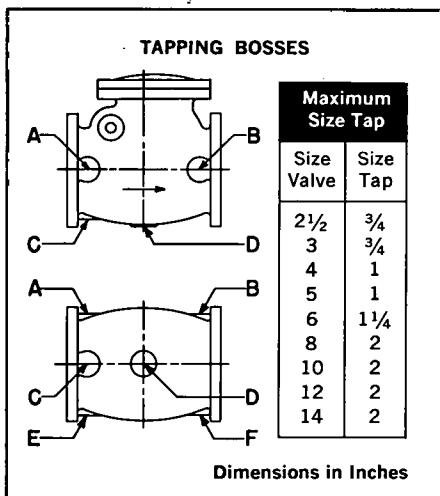
ing towards the bottom of the body, to assist in closing. (See sketch at left.)

Either lever-and-weight or spring-and-lever check valves are adjustable. Both types require field adjustment to meet particular operating conditions. Unless otherwise ordered, the lever and weight or the spring and lever is placed on the right hand side when facing the valve inlet. Under conditions of extreme rapid flow reversal check valves with dual lever arms can be supplied.

Stainless steel hinge pins are featured in all sizes. Lever-and-weight or spring-and-lever type check valves, sizes 4"-14" are supplied with hinge pin extending through bronze bushings, and outside packed glands. Sizes 16" and larger are regularly supplied with hinge pin extending through bronze bushings, and outside packed glands. Alemite fittings for lubrication of bronze bushings in all sizes can be included when so ordered. Both of these designs are detailed at the left.

Screwed-type by-passes can be furnished on check valves, sizes 14" and smaller. Larger sizes are supplied with flange type by-passes. All check valves have bosses on sides and bottom which may be tapped for draining or used for by-pass. When tapping is required, boss designation and size of tap should be stated, as shown below.

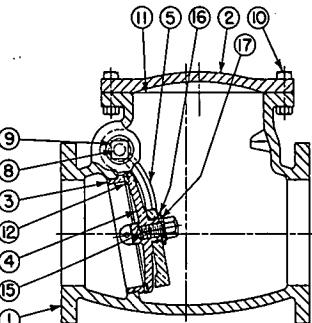
M&H Check Valves, sizes 2½"-14" inclusive, for fire protection systems, are listed and approved by Underwriters Laboratories and Associated Factory Mutuals and are so marked.



Increasing Check Valves

1 Save space in tight piping layouts

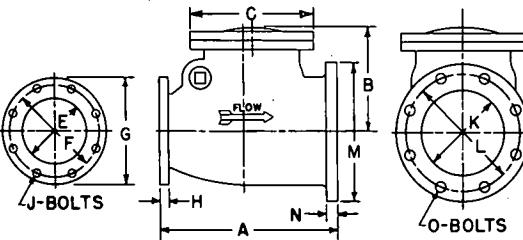
2 Eliminate need and cost of increasing fittings



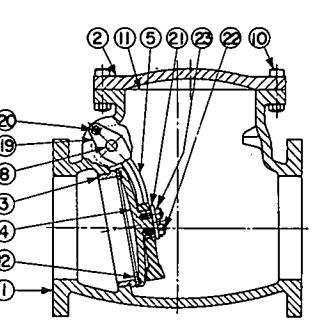
M&H Bronze faced check valves—
5" through 14".

PARTS LIST — TABLE 1

Part No.	Part	No. Re'd	Material
1	Body	1	Cast Iron
2	Cover	1	Cast Iron
3	Body Ring	1	Bronze
4	Clapper	1	Cast Iron
5	Clapper Arm	1	Bronze
8	Hinge Pin	1	Stainless Steel
9	Side Plug	2	Bronze
10	Cover Bolt and Nut	—	Steel
11	Cover Gasket	1	Asbestos
12	Clapper Ring	1	Bronze
15	Cap Screw	1	Bronze
16	Cut Washer	1	Galv. Steel
17	Lock Washer	1	Galv. Steel



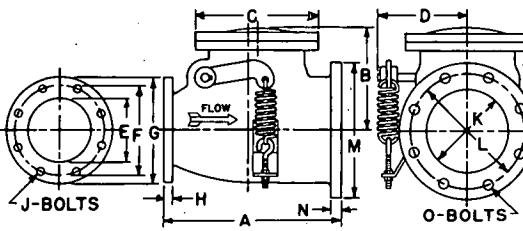
INCREASING CHECK VALVE



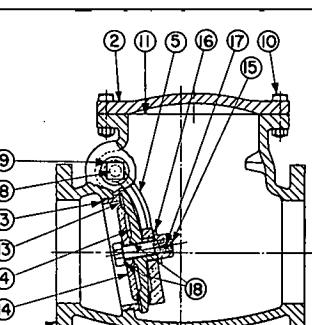
M&H Bronze faced check valves—
16" and up.

PARTS LIST — TABLE 2

Part No.	Part	No. Re'd	Material
1	Body	1	Cast Iron
2	Cover	1	Cast Iron
3	Body Ring	1	Bronze
4	Clapper	1	Cast Iron
5	Clapper Arm	1	Bronze or Cast Steel
8	Hinge Pin	1	Stainless Steel
10	Cover Bolt and Nut	—	Steel
11	Cover Gasket	1	Asbestos
12	Clapper Ring	1	Bronze
19	Gland (Bronze Bushed)	2	Cast Iron
20	Gland Stub and Nut	4	Steel
21	Clapper Cap Plate	1	Cast Iron
22	Cap Screw	—	Steel
23	Lock Wire	1	Steel



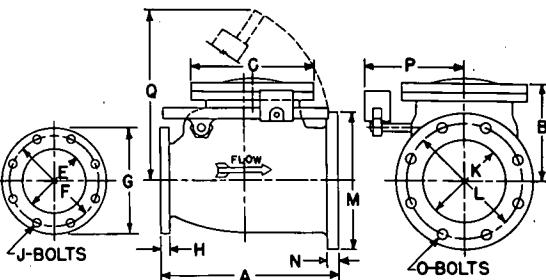
INCREASING CHECK VALVE



M&H Rubber faced check valves—
4" through 16".

PARTS LIST — TABLE 3

Part No.	Part	No. Re'd	Material
1	Body	1	Cast Iron
2	Cover	1	Cast Iron
3	Body Ring	1	Bronze
4	Clapper	1	Cast Iron
5	Clapper Arm	1	Bronze
8	Hinge Plug	1	Stainless Steel
9	Side Plug	2	Bronze
10	Cover Bolt and Nut	—	Steel
11	Cover Gasket	1	Asbestos
13	Disc Ring	1	Rubber
14	Clamp	1	Bronze
15	Clapper Bolt	1	Bronze
16	Clapper Nut	1	Bronze
17	Cotter (Split Pin)	1	Bronze
18	Gasket	2	Copper-Asbestos



INCREASING CHECK VALVE

INCREASING CHECK VALVE — Dimensions in Inches

Valve Size	3" x 4"	4" x 6"	4" x 8"	5" x 6"	5" x 8"	6" x 6"	6" x 8"	6" x 10"	8" x 10"	8" x 12"	A	11	13 1/2	15	15 1/4	16	17	17 1/2	20	21
B	6 1/2	7 3/4	7 3/4	9 1/2	9 1/2	9 3/4	9 3/4	12	12	12	B	6 1/2	7 3/4	7 3/4	9 1/2	9 1/2	12 1/4	12 1/4	14 3/4	14 3/4
C	7 3/8	9 1/4	9 1/4	10 3/4	10 3/4	12 1/4	12 1/4	14 3/4	14 3/4	14 3/4	C	7 3/8	9 1/4	9 1/4	10 3/4	10 3/4	12 1/4	12 1/4	14 3/4	14 3/4
D	6	6 1/2	6 1/2	7 7/8	7 7/8	8 3/8	8 3/8	10 1/4	10 1/4	10 1/4	D	6	6 1/2	6 1/2	7 7/8	7 7/8	8 3/8	8 3/8	10 1/4	10 1/4
E	3	4	4	5	5	6	6	8	8	8	E	3	4	4	5	5	6	6	8	8
F	6	7 1/2	7 1/2	8 1/2	8 1/2	9 1/2	9 1/2	11 3/4	11 3/4	11 3/4	F	6	7 1/2	7 1/2	8 1/2	8 1/2	9 1/2	9 1/2	11 3/4	11 3/4
G	7 1/2	9	9	10	10	11	11	13 1/2	13 1/2	13 1/2	G	7 1/2	9	9	10	10	11	11	13 1/2	13 1/2
H	3/4	1 1/16	1 1/16	1 1/16	1 1/16	1	1	1 1/8	1 1/8	1 1/8	H	3/4	1 1/16	1 1/16	1 1/16	1 1/16	1	1	1 1/8	1 1/8
J	4 5/8	8 5/8	8 5/8	8 3/4	8 3/4	8 3/4	8 3/4	12 7/8	12 7/8	12 7/8	J	4 5/8	8 5/8	8 5/8	8 3/4	8 3/4	8 3/4	8 3/4	12 7/8	12 7/8
K	4	6	8	6	8	8	10	10	10	12	K	4	6	8	6	8	8	10	10	12
L	7 1/2	9 1/2	11 3/4	9 1/2	11 3/4	11 3/4	14 1/4	14 1/4	14 1/4	L	7 1/2	9 1/2	11 3/4	9 1/2	11 3/4	14 1/4	14 1/4	17	17	
M	9	11	13 1/2	11	13 1/2	13 1/2	16	16	16	M	9	11	13 1/2	11	13 1/2	13 1/2	16	16	19	
N	1 1/16	1	1 1/8	1	1 1/8	1 1/8	1 1/8	1 1/8	1 1/8	1 1/8	N	1 1/16	1	1 1/8	1 1/8	1 1/8	1 1/8	1 1/8	1 1/8	1 1/8
O	8 5/8	8 3/4	8 3/4	8 3/4	8 3/4	8 3/4	8 3/4	12 7/8	12 7/8	12 7/8	O	8 5/8	8 3/4	8 3/4	8 3/4	8 3/4	8 3/4	12 7/8	12 7/8	12 7/8
P	6 5/8	7 1/2	7 1/2	8 7/8	8 7/8	9 1/2	9 1/2	11 1/4	11 1/4	11 1/4	P	6 5/8	7 1/2	7 1/2	8 7/8	8 7/8	9 1/2	9 1/2	11 1/4	11 1/4
Q	10 3/8	13	13	16 1/2	16 1/2	16 1/2	20	20	20	Q	10 3/8	13	13	16 1/2	16 1/2	16 1/2	20	20	20	

Larger Sizes Available on Request



Check Valves

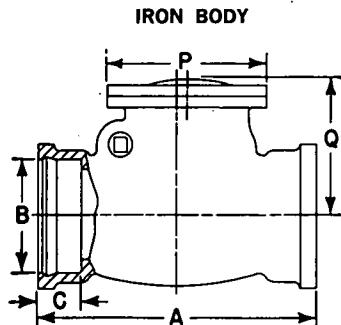


Figure 61—Hub End.

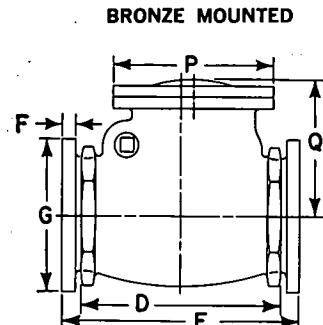


Figure 59—Screwed End.
Figure 60—Flanged End.

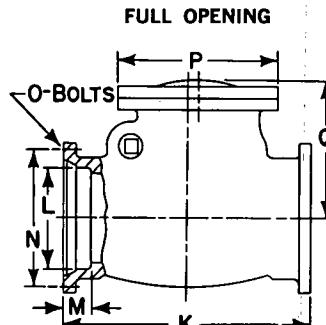


Figure 62-M—Mechanical Joint End.

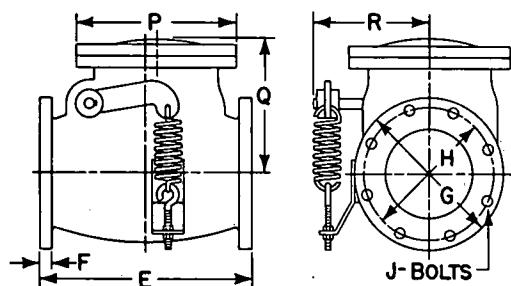


Figure 60-SL—Flanged End with Spring and Lever.

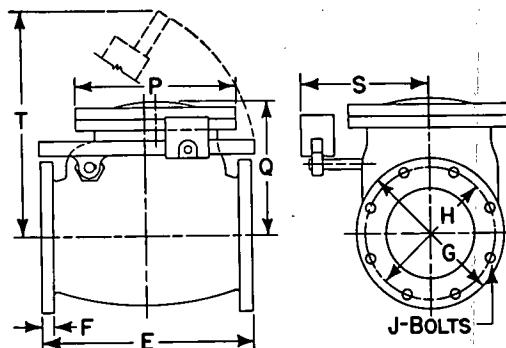
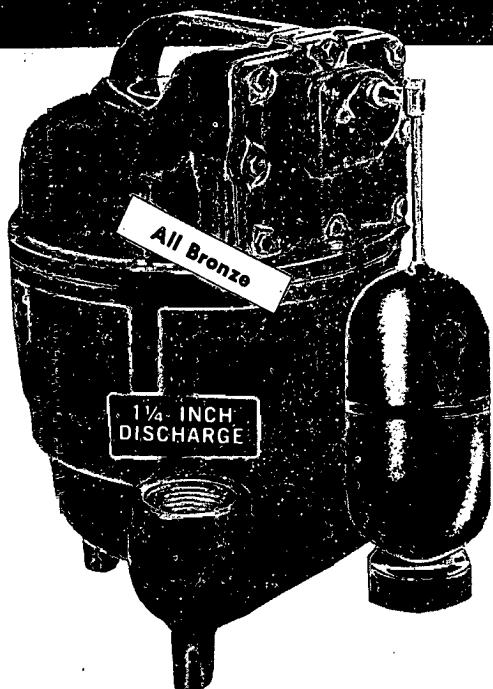


Figure 50—Flanged End with Lever and Weight.

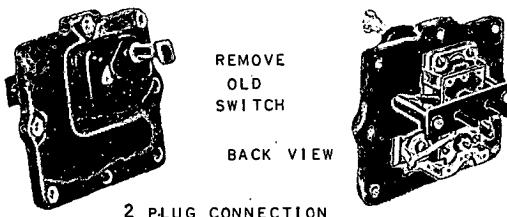
Size Valve		TABLE 14—DIMENSIONS IN INCHES														
A	B	2	2½	3	4	5	6	8	10	12	14	16	18	20	24	30
A	End to End Hub	—	—	16½	18½	18½	22	25½	27½	31¼	35¼	35	36½	37½	46	—
B	Inside Diameter of Hub	—	—	4.76	5.80	6.70	7.90	10.10	12.20	14.30	16.45	18.80	20.92	23.06	27.32	—
C	Depth of Hub	—	—	3½	4	4	4	4	4	4	4	4	4	4	4	—
D	End to End Screwed	6½	10	10½	12½	14¾	15½	18½	—	—	—	—	—	—	—	—
E	End to End Flanged	8	10	10½	13	15	16	19	22	26	30	35	36½	37½	44	49½
F	Flange Thickness	5/8	1½	3/4	1½	1½	1	1½	1½	1½	1½	1½	1½	1½	1½	2½
G	Flange Diameter	6	7	7½	9	10	11	13½	16	19	21	23½	25	27½	32	38¾
H	Bolt Circle	4¾	5½	6	7½	8½	9½	11¾	14½	17	18¾	21½	22¾	25	29½	36
J	Number & Dia. Bolts	4-5/8	4-5/8	4-5/8	8-5/8	8-3/4	8-3/4	8-3/4	12-7/8	12-7/8	12-1	16-1	16-1½	20-1½	20-1½	28-1½
K	End to End Mech. Joint	—	—	13½	16½	—	22	22½	24½	28½	34½	34½	—	—	—	—
L	I. D. Hub Mech. Joint	—	—	4.06	5.00	—	7.09	9.25	11.20	13.40	15.59	17.69	—	—	—	—
M	Depth Hub Mech. Joint	—	—	2½	2½	—	2½	2½	2½	3½	3½	3½	—	—	—	—
N	Bolt Circle Mech. Joint	—	—	6½	7½	—	9½	11¾	14	16½	18¾	21	—	—	—	—
Ö	No. & Dia. T-Head Bolt	—	—	4-5/8	4-3/4	—	6-¾	6-¾	8-¾	8-¾	10-¾	12-¾	—	—	—	—
P	Diameter Cover	6½	6¾	7¾	9¼	10¾	12½	14¾	19	21	23½	27¾	27½	32	38¾	43¾
Q	Center Valve To Top Cover	5½	5½	6½	7¾	9½	9¾	9¾	12	14½	16½	18¾	21½	23½	24½	28
LEVER AND SPRING																
R	Center Valve To End Hinge Pin	4½	5¼	6	6½	7½	8½	10½	13½	13½	15½	17½	18½	19	22½	25
LEVER AND WEIGHT																
S	Center Valve To Outside Weight	4½	5¾	6½	7½	8½	9½	11½	14½	15½	17	19½	20½	21	28½	27
T	Center Valve To End Lever, Valve Open	7½	—	10¾	13	—	16½	20	23½	31	32½	34½	—	42	—	—



Submersible Sump Pumps



QUICK - CHANGE SWITCH



Plug in New Self Connecting Switch, tighten screws and you're "Back in business"

MOTOR $\frac{1}{3}$ H.P. 1/110/60

THERMAL PROTECTION Motor has built-in automatic reset thermal protector.

GUARANTEE All pumps are guaranteed for one year against defective workmanship and/or materials in ordinary applications. Pumps and accessories are stocked nationally by authorized jobbers.

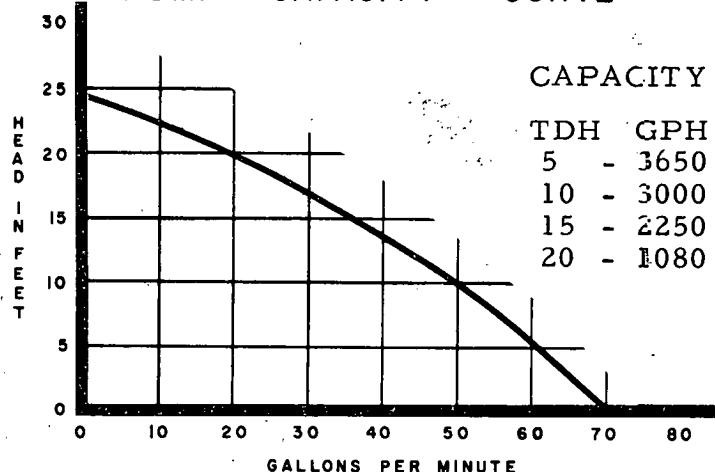
SIMPLICITY The operation and maintenance of your ENPO Submersible Sump Pump is simplicity in itself. It has been the forerunner in the submersible sump pump field since its inception. THE ENPO SUBMERSIBLE SUMP PUMP IS SO STURDY THAT IT CAN BE BOUNCED AROUND ALL DAY LONG ON A ROUGH GOING CONTRACTOR'S TRUCK. NOT ONLY A PUMP BUT A PORTABLE TOOL THAT CAN TAKE IT ON THE TOUGHEST JOBS.

PERFORMANCE Breakdown test on the switch now exceeds $2\frac{1}{2}$ million cycles and best of all should a switch go bad this new Quick-Change Switch makes correction as simple as changing a spark plug in your automobile. It is the most time proved, trouble free, and long lived dependable sump pump on the market.

SEALED CONSTRUCTION Both the switch and the motor housings on the ENPO modern upright submersible pump are completely sealed from water damage. This switch operates under water as well as out of water.

ARMoured Unit is ruggedly constructed and will withstand abuse beyond the call of duty.

PUMP CAPACITY CURVE

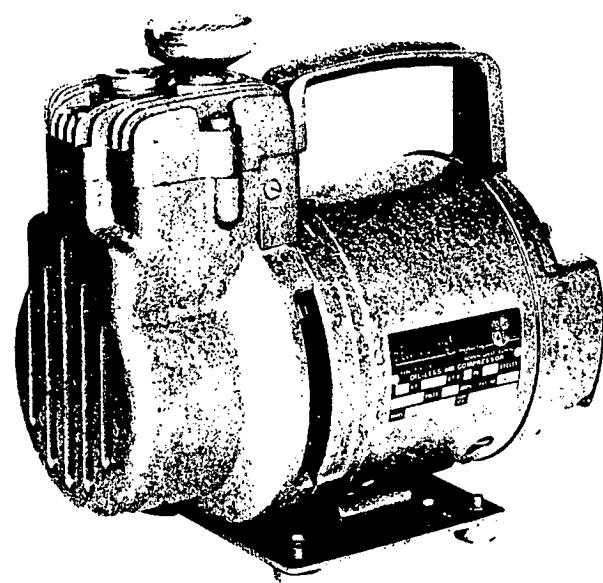
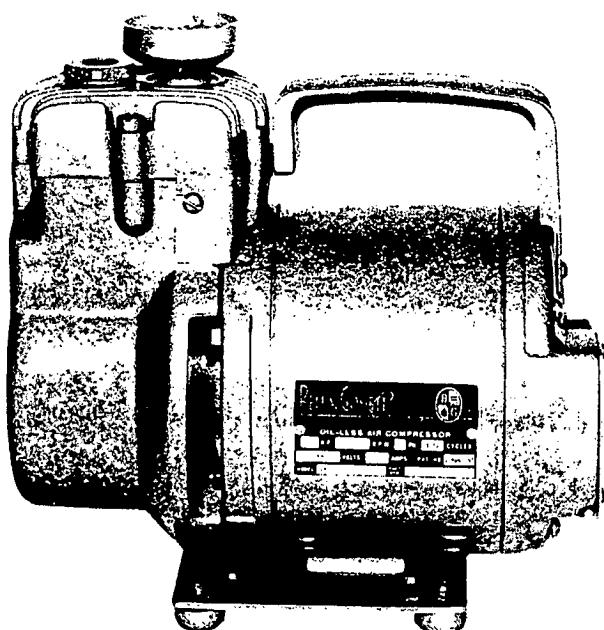


Manufactured by The Piqua Machine & Mfg. Co. • Piqua, Ohio

As used by the
Process Equipment Division
CAN-TEX INDUSTRIES, INC.

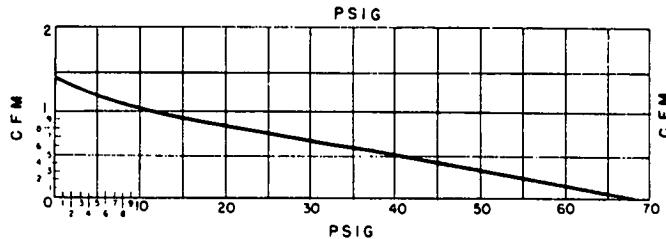
BELL & GOSSETT MINIATURE

$\frac{1}{12}$ HP Oil-less MOTOR COMPRESSOR and VACUUM PUMP



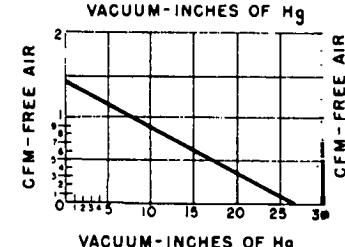
MODEL LC

AVERAGE FREE AIR DELIVERY AT VARIOUS PRESSURES



MODEL LV

VACUUM PUMP PERFORMANCE



SPECIFICATIONS

1/12 H.P., 1725 RPM, split-phase, induction type motor with built in automatic overload protection.

MODEL LC 1.43 CFM Displacement

Single stage—single cylinder*

MODEL LV 1.9 CFM Displacement

Actual weight—18 lbs.

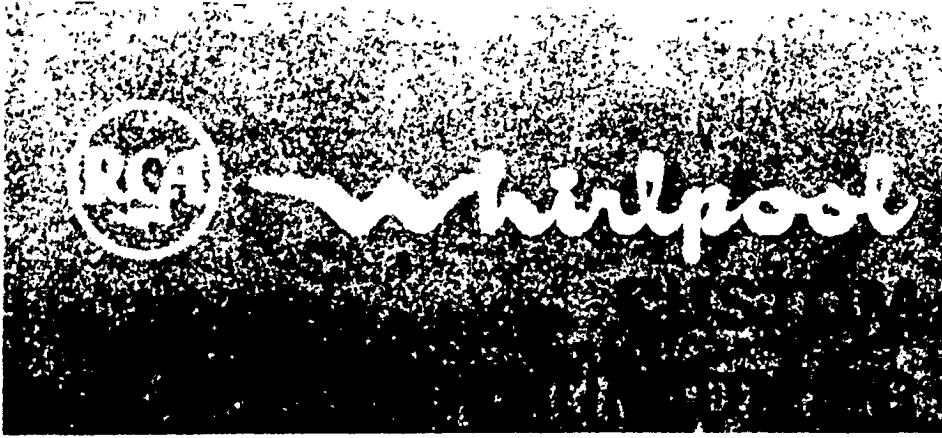
Complete with carrying handle, 8' cord and plug (115 V. only), intake filter (cylinder head port is $\frac{1}{2}$ " NPS), $\frac{1}{4}$ " IPS discharge (or intake on vacuum pump) connection, 4 rubber base cushions.

*NOTE: For special applications: Cylinder head can be mounted horizontally—either side.

Consult

factory for details on this or other possible special considerations.

(Includes Vibration Mounts)



Model AKA-H15 X

Eliminates mildew, mold and
unpleasant damp air odors

Fan Motor

Fan motor is shaded pole type with high impedance protection... rubber mounted for quiet operation. Moves large air volume for greater dehumidification.

Compressor

Highly efficient $\frac{1}{6}$ h.p. rotary compressor is oiled for life and hermetically sealed... rubber mounted to eliminate vibration and minimize noise.

Capacity-Removes up to 4 gals. of moisture from the air in 24 hrs. provides adequate humidity control in enclosed areas up to 16,000 cu. ft. in size:

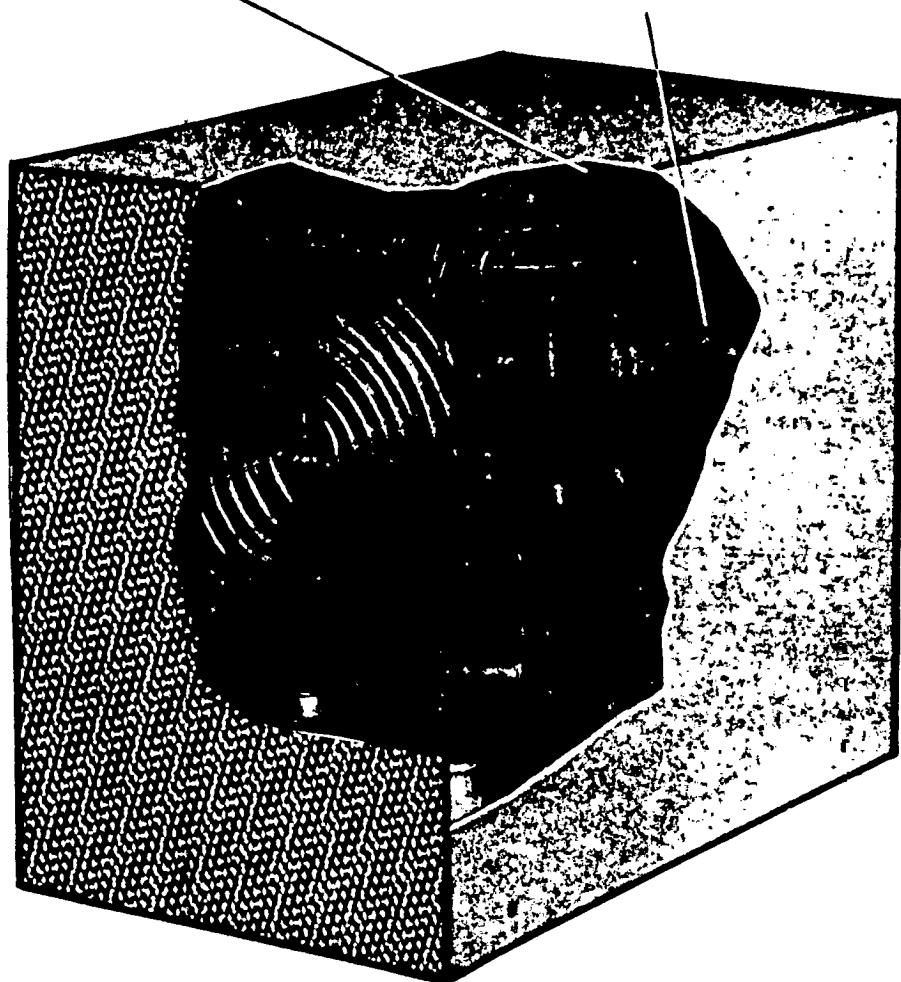
Shell Size	Approx. cu.ft.
7'-0" dia.	480
8'-0" dia.	560
10' w x 16' l x 9' h Tex-Quad.	1300

Economical Operation: Uses little more current than a large electric light bulb.

Power Cord: Unit is equipped with a three prong plug for positive electrical ground.

Approval: Listed under re-examination service of Underwriters' Laboratories, Inc.

Campact: Small, convenient size, 12 x 12 x 17 mounted on a sturdy base.



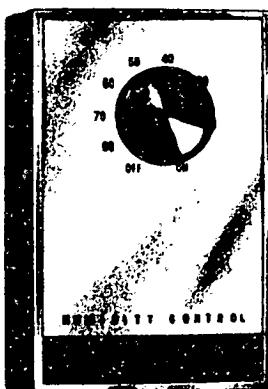
As used by the

Process Equipment Division

CAN-TEX INDUSTRIES, INC.

Minneapolis - Honeywell Regulator Company

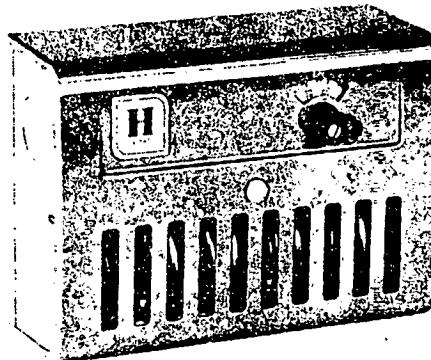
PROVIDES AUTOMATIC CONTROL FOR DEHUMIDIFIERS



H46C
HUMIDITY
CONTROLLERS

T631C

AIRSWITCH



FEATURES

H46 controllers have a molded plastic cover which fits on a heavy folded sheet metal case. The switch contacts are enclosed and dust free. The sensing element is made of exceptionally thin (1 mil) moisture sensitive nylon ribbon which is wound around three bobbins to give, effectively, four element control. This element is sensitive to small relative humidity change and provides reliable operation even when ambient temperature conditions change.

H46C AND E DEHUMIDIFICATION OPERATION

The H46C and E switches make contact on a relative humidity rise to the set point to start the dehumidifier. A decrease in relative humidity to the set point minus the differential breaks the switch contact to stop the dehumidifier.

Turn the H46C and E control knob clockwise \curvearrowright to the setting stop to put the dehumidifier in the ON position. These controls are set to the OFF position by turning the control knob counterclockwise \curvearrowleft to the stop.

ELECTRICAL RATING (amperes):

	Heating or Cooling	
	120v ac	240v ac
Full Load	6.0	3.0
Locked Rotor	36.0	18.0

FEATURES

The ruggedly constructed T631C is treated to resist corrosion. The enclosed MICRO SWITCH* spdt switch is sealed against dust and other foreign substance. The temperature sensing element is protected on all sides. Slots in the front and bottom of the cover permit maximum air circulation over the sensing element.

OPERATION

The action of the AIRSWITCH is controlled by the thermostat sensing element through the snap action MICRO SWITCH precision switch. When actuated by the sensing element the switch either opens or closes the control circuit.

RANGE AND DIFFERENTIAL: Differential non-adjustable.

Range	Differential
20 to 90 F	3 degrees F

ELECTRICAL RATINGS:

Voltage	120 v ac	240 v ac
Full Load	7.4 amp	3.7 amp
Locked Rotor	44.4 amp	22.2 amp
Resistance Load (Not Incandescent)	10 amp	5 amp

DEHUMIDIFIER OPERATION

The normal maximum current for the AKA-H15X dehumidifier is approx. 3 amps at 110V A.C. which is very easily handled by the above controls.

TEX-VIT recommends the thermostat be set at 56° and the humidistat be set at 45% relative humidity for lift station service.

MAINTENANCE

These controls generally require no maintenance, but should the station become exceptionally dirty or dusty, the control elements should be carefully cleaned. Care should be taken while cleaning these elements. Damage can result from rough treatment.



SHADED POLE BLOWERS

350 CFM BLOWER Free Air Delivery. Quiet. Adaptable
Powered by Dependable, Dayton Shaded Pole Motors

DAYTON ELECTRIC MANUFACTURING CO. CHICAGO 48

DAYTON FEATURES

COMPACT, DEPENDABLE, LOW COST, precision-built Dayton Shaded Pole Blowers provide maximum efficiency in quiet air delivery and adaptability.

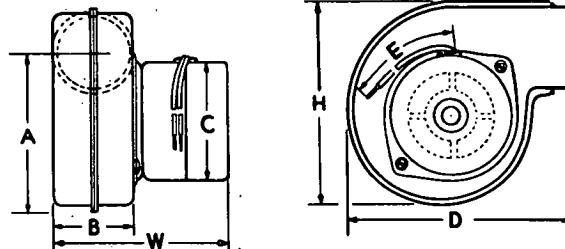
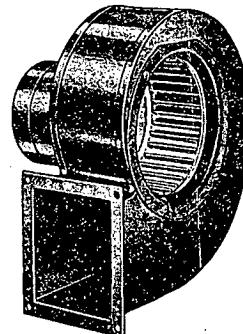
WIDELY USED for ventilating, heating, drying, cooling, heat boosting, exhausting fumes and gases, circulating hot and cold air, etc.

IDEALLY SUITED FOR MANY APPLICATIONS: heating and ventilating equipment, automatic machinery, face and hand dryers, cooling electronic equipment, laboratory and shop equipment, refrigerators and coolers, warm air heating systems, etc.

DAYTON MAINTAINS SUPPLY of standard blowers listed hereon for immediate delivery when required for testing, pilot runs, production requirements, etc.

STANDARD DAYTON BLOWERS are equipped with precision die-stamped wheels direct-driven by Dayton Shaded Pole Motors. Ample wire leads. No radio or TV interference. Sturdy pressed steel housings finished in black baked enamel.

VARIATIONS and/or MODIFICATIONS of these blowers are available on a special order basis. (i.e. special motors, voltage, ball bearings, overload protector, mtg. flange, intake screen, finish, conduit box, wire leads, etc.)



AIR DELIVERY AND ELECTRICAL SPECIFICATIONS

Model No.	Air Delivery in CFM (at Static Pressure—Inches of Water)										Free Air RPM	Motor Volts 60 Cy.	Motor H.P.	Full Load Watts	Full Load Amps.
	0.0"	0.1"	0.2"	0.3"	0.4"	0.5"	0.6"	0.7"	0.8"	0.9"					
2C841	350	340	328	312	296	274	246	206	154	104	1585	115	1/12	185	2.90

DIMENSIONAL DATA

Model No.	Wheel Diam.	Wheel Width	Motor Mtg.	Conduit Box	Intake Diam.	Discharge Diam.	Flange	H Height Less Flange	W Width	D Depth	A Housing	B Motor	C Lead	E Diam.	Shpg. Wt.
2C841	6 $\frac{5}{16}$	2 $\frac{9}{32}$	Rbr	No	5 $\frac{1}{2}$	3 $\frac{25}{32}$ x4 $\frac{1}{2}$	5 $\frac{1}{16}$ x5 $\frac{5}{8}$	11 $\frac{1}{8}$	7 $\frac{25}{32}$	10 $\frac{5}{16}$	8 $\frac{15}{16}$	3 $\frac{7}{8}$	4 $\frac{7}{16}$	12	12

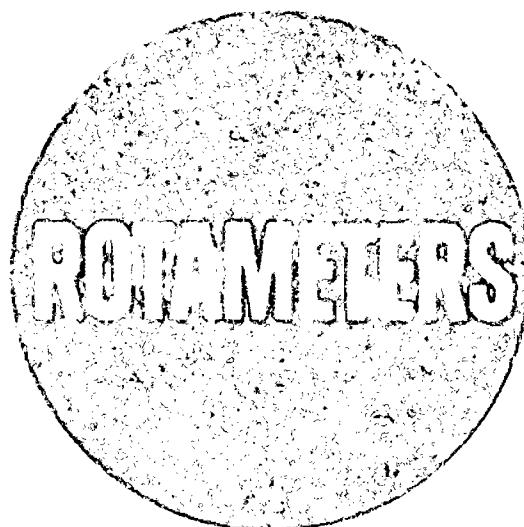
As used by the

Process Equipment Division

CAN-TEX INDUSTRIES, INC.

BULLETIN
JANUARY 1965
REPRINTED APRIL 1965

 **PURGE**



**for
indicating
and manually
controlling
fluid flows
in low ranges**

APPLICATIONS:

- Purging
- Fluid Sampling
- Liquid Level
- Gas Chromatography

Schutte and Koerting COMPANY
INSTRUMENT DIVISION

CORNWELLS HEIGHTS, BUCKS COUNTY, PENNSYLVANIA

PURGE ROTAMETERS

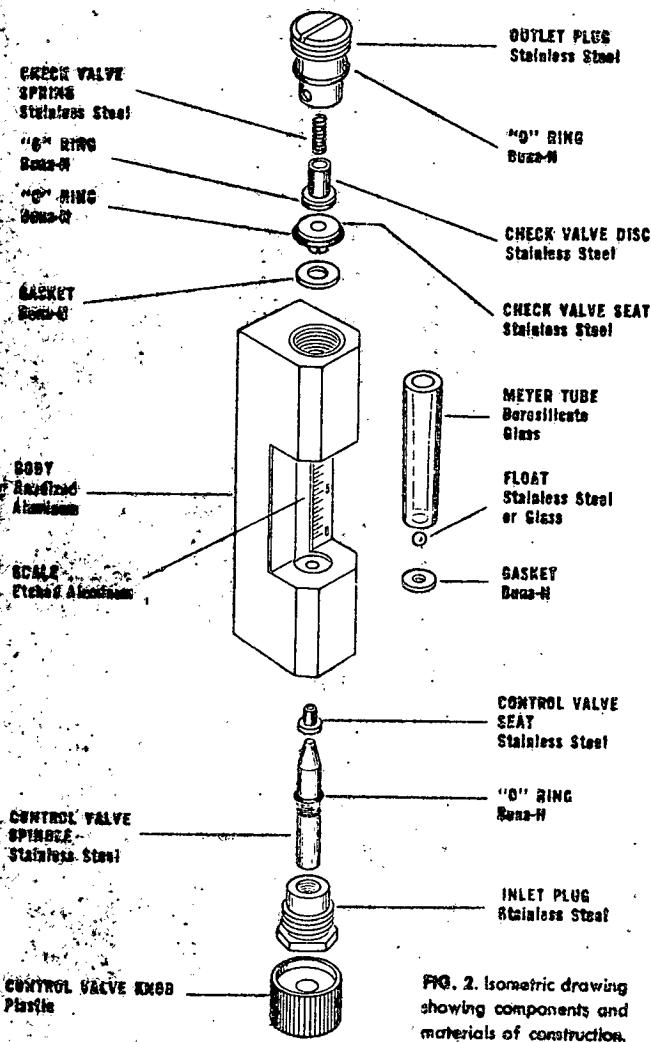


FIG. 2. Isometric drawing showing components and materials of construction.

SK Purge Rotameters are inexpensive, quality-made instruments for indicating and controlling the rate of flow of fluids in low ranges with good accuracy and repeatability. They must be installed in a vertical position—can be located directly in pipelines, or on instrument panels.

APPLICATIONS Rotameters of this type are particularly well suited where purging is required to prevent corrosion or slurry sedimentation in other instruments. These applications include purging orifice legs, instrument cases and pump seals. They can also be used for liquid level, fluid sampling and gas chromatography.

OPERATION These are all variable-area type instruments. Fluid enters the meter at the bottom, flows through the tube, and out at the top. The rate of flow of the fluid passing through the meter is indicated by the position of the ball float which rises with increases and falls with decreases in flow. Rate of flow is read from the position of the center of the ball in relation to the scale on the meter body.

On "flow control equipped" units, flow is controlled either manually by using the control knob or automatically by means of an SK accessory, the differential regulator which is described on page 4. Should back flow occur in the outlet piping, the check valve disc seats itself against the valve seat and, in so doing, prevents back flow.

Capacity ranges can be varied by changing tubes, see tables accompanying each type.

TYPE 1853 PURGE ROTAMETERS

Type 1853 Purge Rotameters have anodized aluminum bodies. All other components in contact with fluid are stainless steel. Scale length is 1.5 ins. They are equipped with a flow control valve and a back flow check valve and can be supplied with a differential regulator for automatic control as shown on page 4. Accuracy is $\pm 10\%$ of maximum flow.

FIG. 1. SK Type 1853 Purge Rotameter. Meter tubes are removed by backing-off the outlet plug at the top of the meter and then pushing the tube up. Complete removal of the outlet plug is not required.

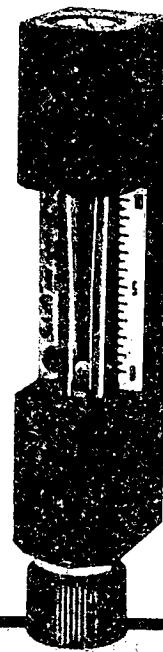
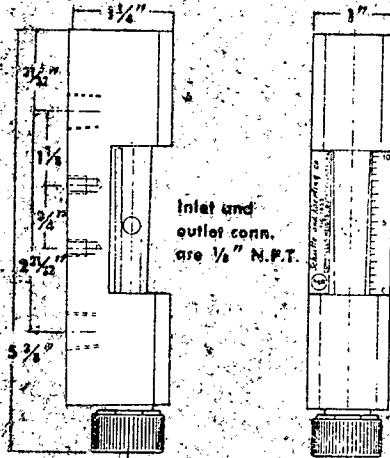


TABLE 1. SIZES, FLOATS, SCALE DATA AND FLOW RANGES FOR TYPE 1853 PURGE ROTAMETERS.

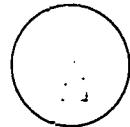


Tube Size	Float Number	Material	Scale	Flow Range	
				Water at 70°F (gph)	Air at 10 psig & 70°F (cfh)
1	BJ-2	Stl. St.	0-10	—	.5
	BJ-5	Stl. St.	0-10	.6	4.5
2	BP-5	Glass	cfh	.2†	2
	BJ-8	Stl. St.	gph	4.0	21†
3	BP-8	Glass	0-10	1.4	12
	BJ-5	Stl. St.	0-10	.1 - 1*	.1 - 2*
4	BP-5	Glass	0-10	1 - 8	2 - 30
	BJ-8	Stl. St.	0-10	12	65
5	BP-8	Glass	0-10	4.5	35

Maximum Operating Pressure—200 psig Maximum Operating Temperature—200°F

*The low and the high range are obtained in the lower and in the upper half of the double-taper meter tube respectively.

†Furnished with 0-10 scale



TYPE 1871-V PURGE ROTAMETERS

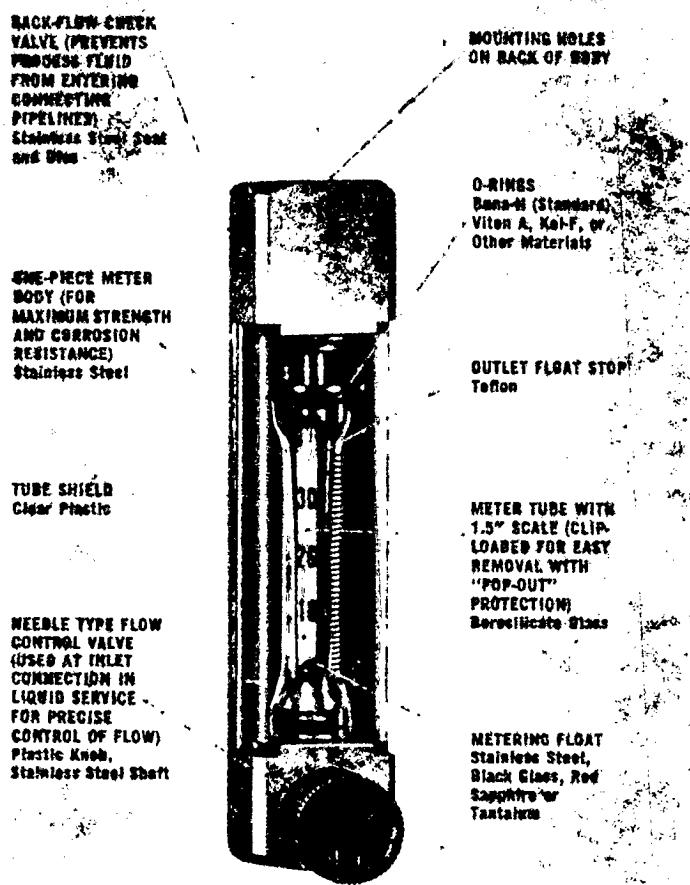


FIG. 3. SK Type 1871-V Purge Rotameter. All metal parts are stainless steel for maximum strength and corrosion resistance.

SK Type 1871-V Purge Rotameters have one-piece bodies and all metal parts are stainless steel. Various metering tubes and floats can be used to obtain a wide range of capacities as indicated by Table 2. All sizes of tubes are interchangeable without special adapters. Scale length is 1.5". A unique clip arrangement is used to hold the tube firmly in place yet permit quick, easy removal as indicated by the photos below. This device uses no springs and prevents "pop-out" of the tube on pulsating flows or sudden flow surges. "O" rings seal the tube at top and bottom. Two models are available. The Type 1871-V is equipped with a precision needle-valve for close flow control. The Type 1871 has no valve. Accuracy is $\pm 10\%$ of maximum flow.

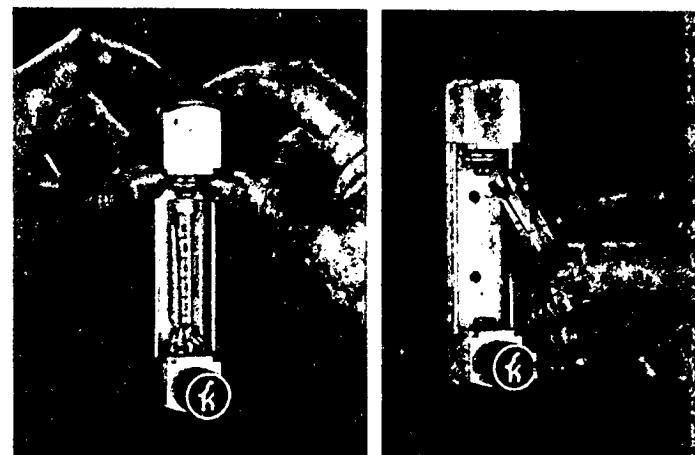


FIG. 6. To facilitate changing metering tubes and O-rings, SK has developed a unique clip-load construction. A tube can be disassembled by merely removing the plastic shield (which protects the tube from external damage) and pushing the outlet adapter upward. This releases the tube and makes the O-rings fully accessible. No springs are employed in this design.

TABLE 2. SIZES, FLOATS, SCALE DATA AND FLOW RANGES FOR TYPE 1871-V PURGE ROTAMETER

Tube Size	Float Number	Material	Scale	Flow Range	
				Water at 70° F. (gph)	Air at 10 psig and 70° F. (c.f.m.)
1	BJ-3	St. St.	0-10	.6	4.5
2	BP-5	Black Glass	0-10	21	2
2	BJ-5	St. St.	0-10	4.2	211
3	BP-8	Black Glass	0-10	14	82
4	BJ-5	St. St.	0-10	1.1	1.3
4	BP-3	Black Glass	0-10	2.6	23
5	BJ-3	St. St.	0-10	12	65
5	BP-8	Black Glass	0-10	4.6	85

Max. Operating Pressure—200 psig. Max. Operating Temperature—200° F.

*Low and high ranges are obtained in the lower and in the upper half of the double-taper meter tube respectively.

Furnished with 0-10 scale.

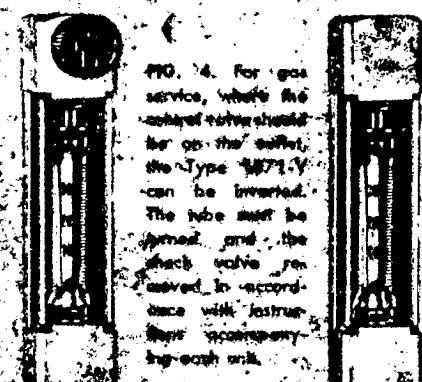


FIG. 3. SK Type 1871 Purge Rotameter. This unit is supplied without control valve but corresponds to the Type 1871-V in all other respects.

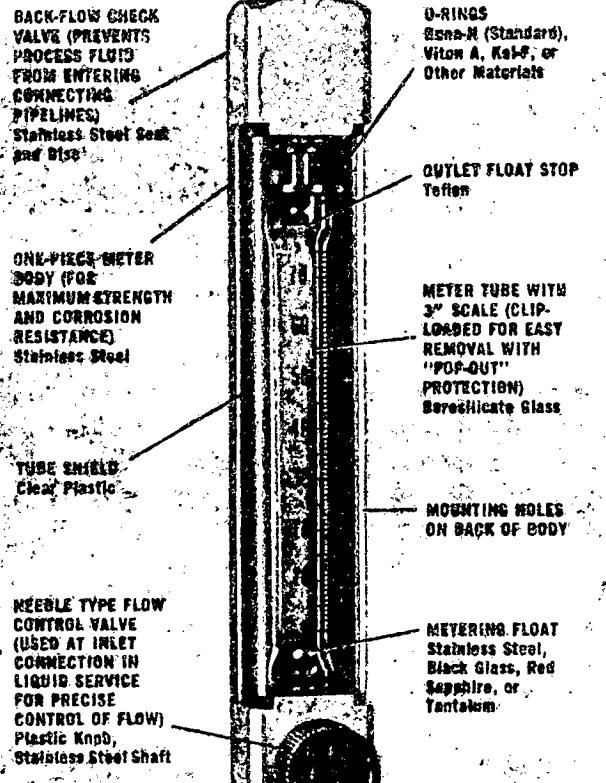


FIG. 7. SK Type 1873-V Purge Rotameter. All metal parts are stainless steel for maximum strength and corrosion resistance.

TYPE 1873-V PURGE ROTAMETERS

SK Type 1873-V Purge Rotameters are larger than the Type 1871-V Rotameter described on page 3 and have a 3 inch scale. In all other respects, they are similar to Type 1871-V instruments. Two models are available. The Type 1873-V is equipped with a precision needle-valve for close flow control. The Type 1873 has no valve. Accuracy is $\pm 5\%$ of maximum flow.



FIG. 8. For gas service, where the control valve should be in the outlet, the Type 1873-V can be inverted. The tube must be turned and the check valve removed in accordance with instructions accompanying each unit.



FIG. 9. SK Type 1873 Purge Rotameter. This unit is supplied without control valve but corresponds to the Type 1873-V in all other respects.

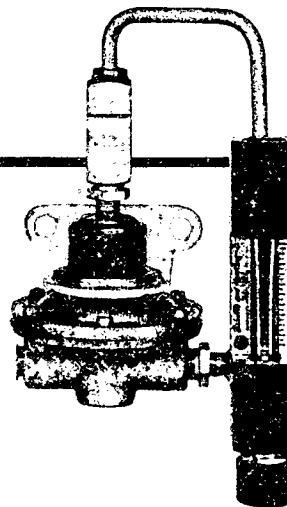


FIG. 10. SK Type 1853-DR Purge Rotameter. The "DR" following the type number indicates that the Purge Rotameter is supplied with a Differential Regulator for simplified automatic control of purge flow. This suffix is also used with Type 1871-V and 1873-V units which are then termed Type 1871-V-DR and Type 1873-V-DR Purge Rotameters. It is prepped for easy installation and has an integral mounting bracket. The unit operates on an upstream-downstream pressure differential principle to keep flow constant for any given setting of the needle-valve.

TABLE 3. SIZES, FLOATS, SCALE DATA AND FLOW RANGES
FOR TYPE 1873-V PURGE ROTAMETER

Tube Size	Number	Float Material	Scale	Flow Range	
				Water (gph)	Air at STP (scfh)
1/4"-10-G-3	BP-4	Black Glass	0-10	.06	.65
	BA-4	Red Sapphire	0-10	.11	.97
	BJ-4	Stl. St.	0-10	.23	1.59
	BD-4	Tantalum	0-10	.52	3.63
1/4"-20-G-3	BP-4	Black Glass	0-10	.54	2.4
	BA-4	Red Sapphire	0-10	.85	4.6
	BJ-4	Stl. St.	0-10	1.4	6.9
	BD-4	Tantalum	0-10	2.4	10.6
1/4"-42-G-3 (Dow Taper)	BJ-5	Stl. St.	0-10	(.08-1.6) (1.6-11.5)	(.11-4.2) (4.2-29)
	BP-5	Black Glass	0-10	(.016-63) (.63-5.0)	(.42-7.6) (7.6-50)
1/2"-15-G-3	BP-8	Black Glass	0-10	1.5	9.4
	BA-8	Red Sapphire	0-10	2.3	12.5
	BJ-8	Stl. St.	0-10	4.0	18.6
	BD-8	Tantalum	0-10	6.5	27.9
1/2"-33-G-3	BP-8	Black Glass	0-10	7.9	44
	BA-8	Red Sapphire	0-10	11.5	56
	BJ-8	Stl. St.	0-10	18.6	81
	BD-8	Tantalum	0-10	28.7	118

1146-5M-465R Printed in U.S.A.

STP = 14.7 psig and 70°F
Maximum Operating Pressure
= 200 psig
Maximum Operating Temperature
= 200°F
All inlet and outlet connections
are $1/4"$ N.P.T.

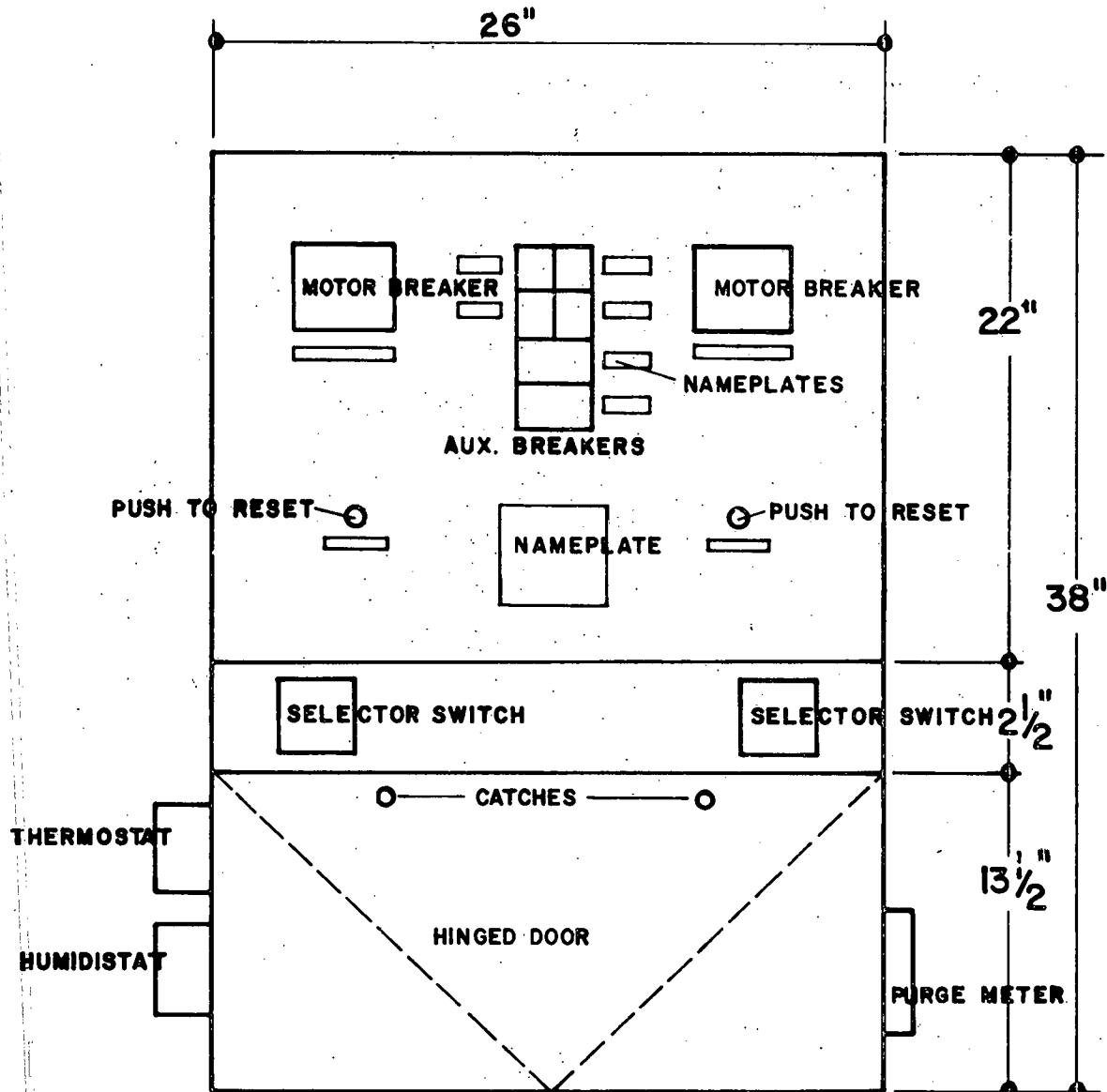


Schutte and Koerting COMPANY
INSTRUMENT DIVISION

CORNWELL HEIGHTS, BUCKS COUNTY, PA. 18023

EXPORT DEPT. 1505 Race Street, Philadelphia, Pa. 19102, U.S.A.

LIQUID PUMPS • HEAT EXCHANGER EQUIPMENT
ROTAMETERS • FLOW INDICATORS • RADIAFON TUBES
THERMOMETERS • CONDENSERS AND VACUUM PUMPS • CHILLING EQUIPMENT
VALVES • SPRAY NOZZLES AND ATOMIZERS • GEAR PUMPS • DESUPERHEATERS



TEX-TROL PRESSURE SENSORS

APPLICATION

Control of liquid level in any reservoir or wet well by starting and stopping pumps, valves or alarms, may be used with purged air or direct pressure systems.

FEATURES

- *Remote location away from adverse or hazardous conditions.
- *Independent start and stop adjustments.
- *Economical, dependable, virtually maintenance-free.
- *All contacts dust proof.

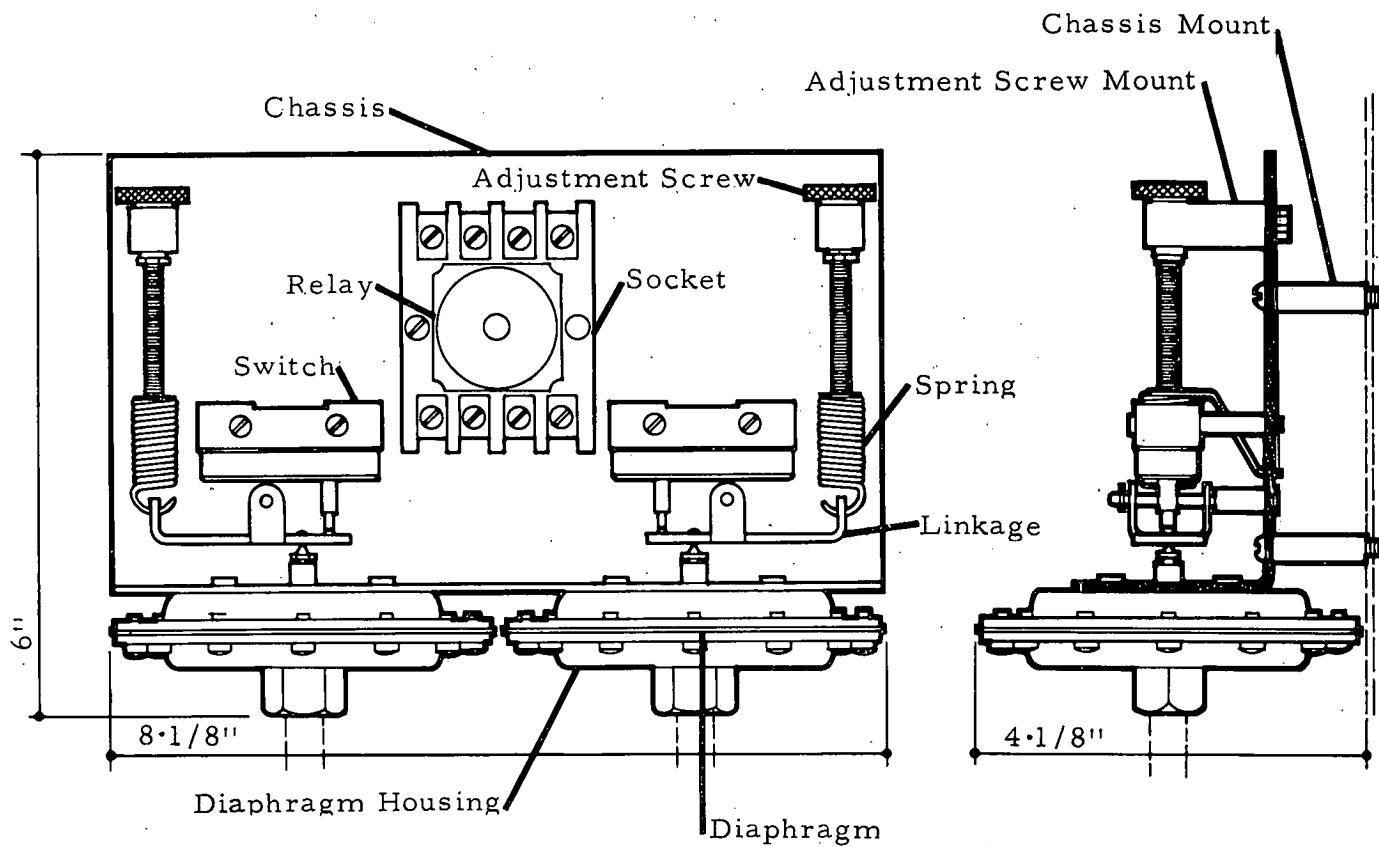
RATING

- *Range adjustable from 3" to 10' -0" with differential of 3" to 9'-0".
- *15 amps @ 115 Volt AC 7.5 amps @ 230 Volts
- *Maximum operating pressure 10 psi.

ADJUSTMENT

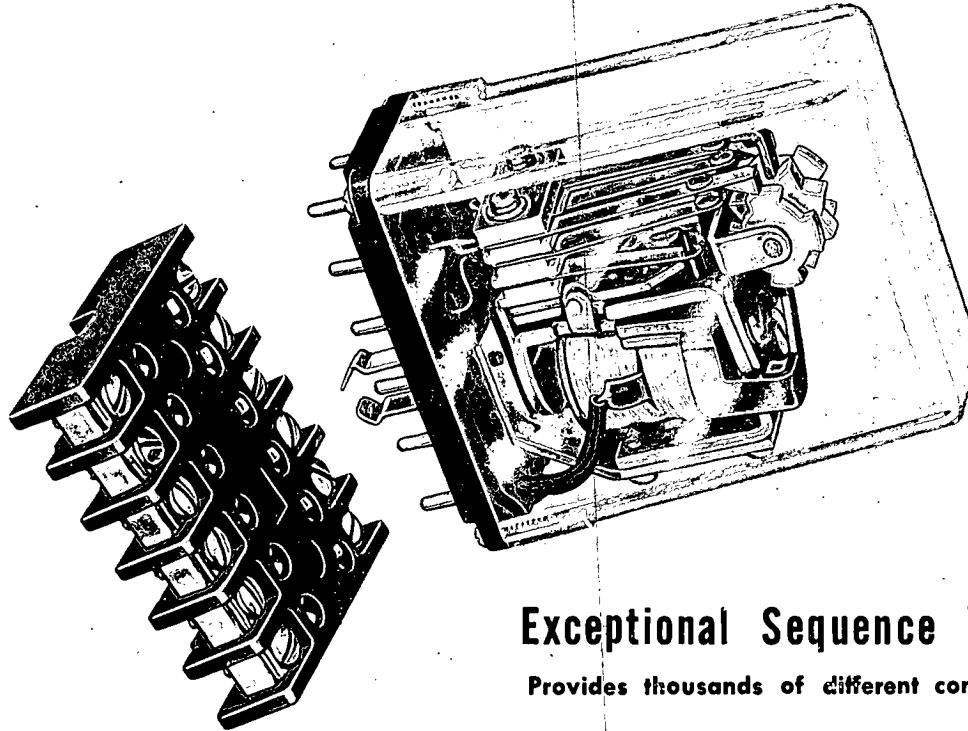
The Micro switch on the left should click on at the desired high or start level. The Micro switch on the right should click off at the low or stop level. The holding relay will be energized between these two levels. Changing or adjustment of these levels may be accomplished as follows:

Loosen lock nut and turn adjustment knob clockwise to raise setting or counter clockwise to lower setting. One full turn of adjustment knob is approximately 6" of water level. Tighten lock nut while holding adjustment knob to prevent it from turning.



STRUTHERS-DUNN, Inc.

Data Bulletin 6211



Exceptional Sequence Versatility

Provides thousands of different control sequences

Dunco 211 Frame SEQUENCE RELAYS for INDUSTRIAL CONTROL

with 12-pin plug mounting in heavy duty industrial sockets

The extremely reliable and versatile Dunco 211 Frame Sequence Relay is now available as a companion unit to the 219 Frame General Purpose Relay and the 255 Frame Mechanical Latch, Electrical Reset Relay. Each of the three types is mounted on an industrial style 12-pin plug, is enclosed in a clear plastic cover, and is used with the Dunco #27390 industrial type socket.

Designed to provide exceptional sequence versatility, Frame 211 relays feature a double cam movement on each step. The cam rotates half a step when the coil is energized and completes the step when de-energized. Contacts are DP, single or double throw. 8-tooth ratchets are standard. 6-tooth ratchets are available on special order.

Standard contacts operate on the energizing impulse, but can be adjusted to operate when de-energized if specified. Make before break between two ST contacts results when one is adjusted to "break" when the coil is de-energized.

This optional feature whereby contacts can be made to operate on the de-energizing stroke has provided simplified, low cost schemes for alternating operations such as between two pumps or two compressors. Frame 211 relays are also widely used in automatic process and machine tool control, traffic control, door and window openers and similar applications.

Coils are available for AC or DC as specified.

The basic magnet assembly is rugged and powerful. Heavy flexing contacts will carry 150% of rated loads. Molded spacers lock contacts into position and provide 150-volt insulation throughout to meet U.L. requirements. Ratchets and cams are of long-wearing low friction plastic material.

Frame 211 relays are also available in open types and in hermetically-sealed metal cans. For details on these, write for Data Bulletin 571.

CONTINUOUS DUTY COILS

COMMON 60 CYCLE AC RATINGS

Voltage	Current in Amperes		Coil Gauge
	Inrush	Continuous	
12	1.400	.800	26
24	.800	.455	29
115	.150	.085	36
230	.080	.040	39

Power Requirement—10 to 12 volt-amperes

COMMON DC RATINGS

Voltage	Current in Amps.	Coil Gauge
6	.950	27
12	.470	30
24	.180	34
32	.150	35
115	.040	40

Power Requirement—5 to 6 Watts

Many other coils can be supplied to meet the needs of specific applications.

CONTACT ARRANGEMENT AND SEQUENCE

Standard S-D 211 Relays have contacts that operate each time the coil is energized in a fixed progression as shown in this table:

Relay Type	Arrangement	Contact	Step				Additional Steps
			1	2	3	4	
211AXAP	DP-ST	#1	0	X	0	X	Repeat
		#2	X	0	X	0	
211BXXP	DP-ST	#1	0	X	0	X	Repeat
211XBXP	DP-DT	#1 & #2	Transfer on each impulse				Repeat

"0"—CONTACT OPEN

"X"—CONTACT CLOSED

Contact Ratings: Based on straight resistance loads having little or no inductance or inrush, contacts are rated 5 amperes at 115 V. AC, and 5 amps. at 24 V. DC, or

0.5 amp. at 115 V. DC. Inrush from motor or lamp loads should be limited to 15 amperes.

STANDARD SPECIFICATIONS

Mounting: Plug-in on Dunco #27390 socket. Suitable for table or wall mounting.

Contacts: Fine silver buttons 3/16" diameter, on phosphor bronze flexing arms. 5 amp. current carrying capacity.

Insulation: 1/4" over surface, 1/8" through air, 1500-volt dielectric test.

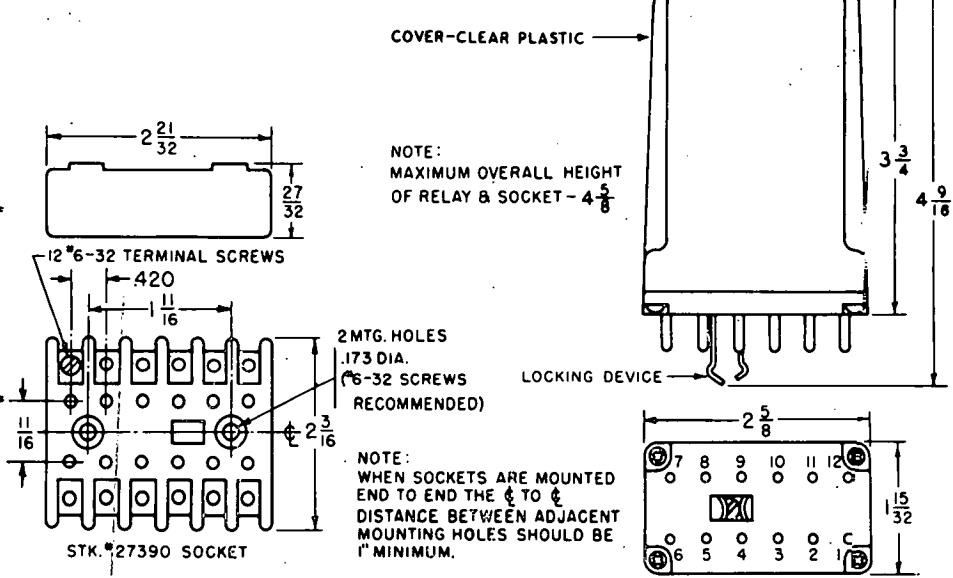
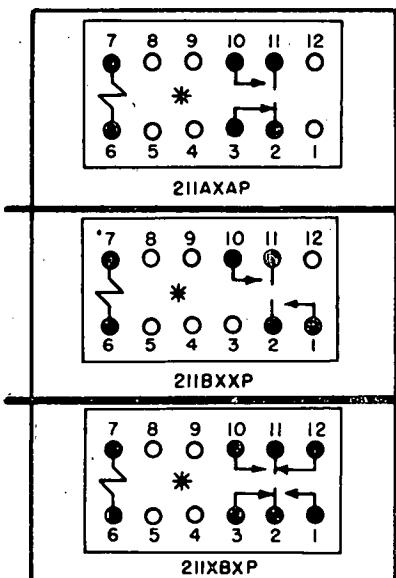
Coils: Enamelled copper wire on acetate lined bobbins.

Maximum Ambient: 50° C.

Life: 10,000,000 operations. No Load.

Operation: Operate 15% below rated AC voltage, or 20% on DC. Withstand 110% nominal voltage without damage.

DIMENSIONS • WIRING



ORDERING INFORMATION

Standard relays: Specify relay type according to sequence arrangement desired as per above list. Specify operating coil required.

Special relays: Indicate all special features desired such as 6-tooth ratchets, contact sequence, single or double throw contacts, and operating coil required.

Sockets: Specify Dunco #27390.

STRUTHERS-DUNN, Inc., Pitman, New Jersey

Makers of the world's largest assortment of relay types



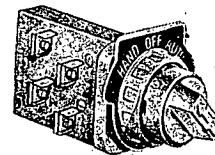
MANUAL SWITCHES AND ELECTRICAL ACCESSORIES USED IN TEX-VIT CONTROL PANELS

Oil Tight H-O-A Selector Switch

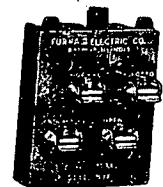
The H-O-A selector switch is basically a SPDT switch with a center "off" position, and consists of two parts.



No. 1 - Operator (Furnas BJSIC)



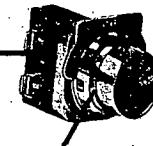
No. 2 - Contact Block (Furnas BJX)



Oil Tight Push-to-test Pushbutton

The Push-to-test switch is a NO. monary contact, spring return switch.

No. 2 - Contact Block (Furnas BJK)



No. 1 - Operator (Furnas BJP2)

Oil Tight Off-On-Test Switch

The Off-On-Test switch is similar in appearance to the H-O-A switch and require the same contact blocks. The operator is a Furnas BJD4ID

On-Off Switch

On-Off switches mounted on the control panel use a Furnas BJK contact block and a BJSIA operator.

All of the above mentioned contact blocks are rated as follows at 220V AC

Inrush	30 Amps
Breaking	3 Amps
Carrying	10 Amps

TEX-VIT Tilt Switches

The switches used to control the lights and/or blower by opening and closing the cover. Both switches are rated at 5 Amps at 115V AC

TV-100 - One circuit switch for stations with lights only.

TV-200 - Two circuit switches for stations with lights and blower.

(These items are built especially for lift stations by the Process Equipment Division, CAN-TEX INDUSTRIES, INC., and should be ordered from same)

The following specifications are specifically for Arrow-Hart.
Occasionally other brands may be used which will be equal or
superior to these.
Replacements may be ordered from the following numbers.

RECEPTACLES

Receptacles are 3-wire grounding type - 15 Amp at 125 volts



No. 5252 Duplex Outlet



No. 5221 Single Outlet

SWITCHES



No. TL-1 Single Pole
10 Amps at 125V



No. 1992 Double Pole
20 Amps at 125/227V

CAPS



No. 5266 15 Amps at 125V AC

VAPORPROOF LIGHT FIXTURES



Killark VGC-1 Vaporproof Box



Killark VFC 100 Fixture cap

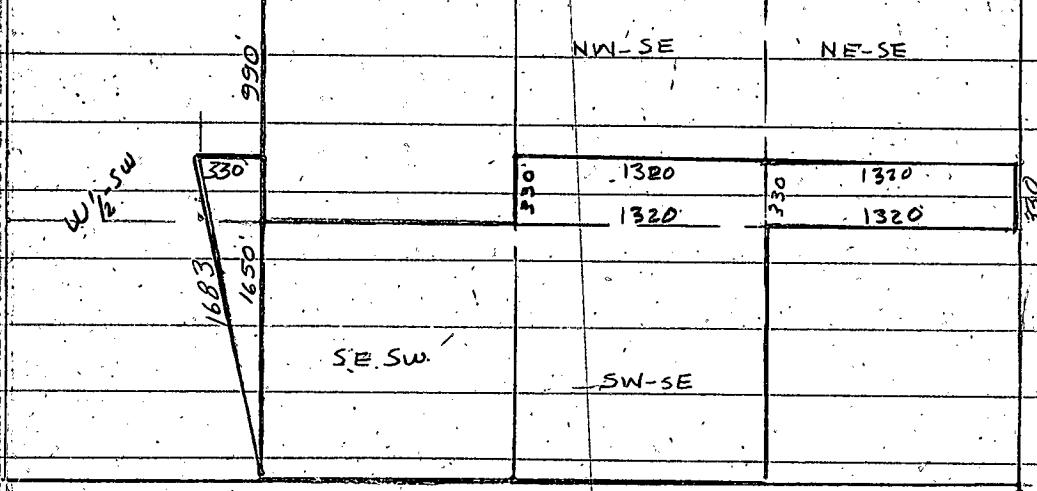


Killark VCG 100 Globe



Killark VAG 100 Guard

No. 2



KEY:- DEEDED TO CHAS WILEY - D.R. 50 - PAGE 415

LOT # 19

A part of the $\frac{1}{4}$ of the NW $\frac{1}{4}$ of Section 13, TGN, R29, beginning at a point that is 105' feet West of the Northeast corner of the said $\frac{1}{4}$ of the NW $\frac{1}{4}$; thence running South 660.1 feet and to the North line of a road. Thence, running North 88 degrees East over and along the said North line of said road for a distance of 100 feet. Thence, running North 658.85 feet; thence running West for a distance of 100 feet and to the place of beginning. Containing in all 1.516 acres, more or less.

LOT # 20

A part of the $\frac{1}{4}$ of the NW $\frac{1}{4}$ of Section 13, TGN, R29, beginning at a point that is 960 feet West of the Northeast corner of the said $\frac{1}{4}$ of the NW $\frac{1}{4}$; thence running South for a distance of 658.85 feet and to the North line of a road; thence running North 88 degrees East over and along the said North line of said road for a distance of 100 feet. Thence, running North for a distance of 657.60 feet; thence running West for a distance of 100 feet and to the place of beginning. Containing in all 1.514 acres, more or less.

LOT # 21

A part of the $\frac{1}{4}$ of the NW $\frac{1}{4}$ of Section 13, TGN, R29, beginning at a point that is 860 feet West of the Northeast corner of the said $\frac{1}{4}$ of the NW $\frac{1}{4}$; thence running South 657.60 feet and to the North line of a road. Thence, running North 88 degrees East over and along the said North line of said road for a distance of 100 feet. Thence, running North 656.35 feet; thence running West for a distance of 100 feet and to the place of beginning. Containing in all 1.511 acres, more or less.

LOT # 22

A part of the $\frac{1}{4}$ of the NW $\frac{1}{4}$ of Section 13, TGN, R29, beginning at a point that is 760 feet West of the Northeast corner of the said $\frac{1}{4}$ of the NW $\frac{1}{4}$; thence running South for a distance of 656.35 feet and to the North line of a road. Thence, running North 88 degrees East over and along the said North line of said road for a distance of 100 feet. Thence, running North 655.1 feet; thence, running West for a distance of 100 feet and to the place of beginning. Containing in all 1.508 acres, more or less.

LOT # 23

A part of the $\frac{1}{4}$ of the NW $\frac{1}{4}$ of Section 13, TGN, R29, beginning at a point that is 660 feet West and 329.1 feet South of the Northeast corner of the said $\frac{1}{4}$ of the NW $\frac{1}{4}$. Thence, running South for a distance of 326 feet and to the North line of a road. Thence, running North 88 degrees East over and along the said North line of said road for a distance of 660.06 feet and to the East line of the said NW $\frac{1}{4}$. Thence, running North over and along the said East line of the said NW $\frac{1}{4}$ for a distance of 57.3 feet; thence, running West for a distance of 450 feet. Thence, running North for a distance of 255 feet; thence, running West for a distance of 210 feet and to the place of beginning. Containing in all 2.15 acres, more or less.

Donald F. Overbay and
Katherine E. Overbay,
husband and wife

and

William E. Leach and
Patricia J. Leach,

Agreement

Consid. \$1.00 and o.v.c.

Dated June __, 1956

Ack. (Date not shown) Before
Prosecuting Atty. 10th Judicial
Circuit, Monroe Co., Ind. (Seal)

Recorded August 25, 1956

Misc. Record 34, pages 3-5

Lots No. 6, 7, 8 and 4 of the Gordon Fisher Tracts an unrecorded
plat, lying in the Southwest Quarter of Section 28, Township 9 North,
Range 1 West described as follows, to-wit:

Beginning at a point that is 1558.77 feet North and 385.57 feet East
of the Southwest corner of said Southwest quarter, thence running
North 6 degrees West for a distance of 426 feet more or less and to
the center of a branch, thence, over and along the center line of said
branch the two following courses and distances, North 53 degrees
East 63 feet, thence South 65 degrees East 66 feet, thence leaving
said branch and running South 10 degrees East for a distance of 172
feet, thence North 84 degrees East for a distance of 186 feet and to
the West Property Line of North College Avenue, thence running
along the West Property Line of North College Avenue the following
courses and distances: South 12 degrees 30' East 103.5 feet, South
19 degrees East 103.5 feet, South 21 degrees East 133.5 feet, thence
leaving the west property line of North College Avenue and running
South 65 degrees West 48.5 feet, thence South 89 degrees West 223 feet
and to the Northeast corner of Lot No. 3 in Gordon Fisher's Tract,
an unrecorded plat, thence running North 79 degrees West 27.5 feet,
and thence running North 87 degrees and 30' West a distance of 125.9
feet and to the place of beginning.

Lot No. 5 of the Gordon Fisher Tracts, an unrecorded plat, lying in
the Southwest Quarter of Section 28, Township 9 North, Range 1 West,
described as follows, to-wit:

A part of the Southwest Quarter of Section 28, Township 9 North, Range
1 West, beginning at a point that is 1867.06 feet North and 488.17
feet East of the Southwest corner of the said Southwest Quarter.
Thence, running North 10 degrees West for a distance of 172 feet,
more or less, and to the center line of a branch. Thence, running
over and along the center line of said branch the following courses
and distances: North 50 degrees East 78.5 feet; North 28 degrees
East 71 feet North 61 degrees East 82 feet and North 50 degrees East
220 Feet, more or less, and to the West property line of North College
Avenue, extended. Thence, running over and along the said west prop-
erty line of said College Avenue the following courses and distances:
South 19 degrees West 82 feet; South 18 degrees 30 minutes West 85 feet;
South 8 degrees West 57 feet; South 1 degree East 82 feet; South
7 degrees East 72 feet. Thence, leaving the west property line of
College Avenue and running South 84 degrees West for a distance of
216 feet and to the place of beginning. Containing in all 1.49 acres,
more or less.

NOW THEREFORE, the Grantors hereby give and grant unto
Grantees, their heirs, administrators, executors, personal representa-
tives and assigns an easement or right of way in, over, under,
through, and along the above described lands of Grantors for the
purpose of installing and maintaining a water line, commencing at the
northern end of the water line now terminating at the northern edge
of land now owned by Vaughn P. Clipp and Ruby Faye Clipp, running
thence in a northwesterly direction, thence in a northerly direction,
thence easterly, thence in a northerly direction to the lands of
Grantors, it being the intention of Grantors that the above described

courses follow over and along the right of way heretofore determined by Grantors and Grantees and upon which right of way partial preparation and installation has been begun.

It is understood that Grantors, their administrators, heirs, executors, personal representatives and assigns shall have the right and privilege to tie into, make and maintain one (1) connection of one and three quarter inch (1 3/4) diameter from and off the water line installed by Grantees. Provided, however, that Grantors, their heirs, administrators, executors, personal representatives and assigns shall be responsible for and obligated to keep, maintain and repair all that part of the water line which lies South of the connection made by them. Provided, further, however, that in the event Grantors, their heirs, administrators, executors, personal representatives, or assigns shall fail and refuse to keep, maintain and repair that part of the water line which lies South of the connection made by them, then in that event Grantees, their heirs, administrators, executors, personal representatives or assigns shall have the right and privilege of entering upon the above described land of Grantors for the purpose of maintaining and repairing the water line lying South of the connection made by Grantors.

Grantees, their heirs, administrators, executors, personal representatives and assigns shall have the right and privilege of entering upon the above described land of Grantors, for the purpose of maintaining and repairing the water line between the connection of Grantees and the point where said line enters onto the above described land of Grantees, subject to the following conditions.

A. Such repair and maintenance shall be at the cost and expense of Grantees, their heirs, administrators, executors and assigns.

B. At the time of entering upon the above described land of Grantors, Grantees, their heirs, administrators, executors, or assigns shall post with any reputable disinterested realtor doing business in the City of Bloomington, Indiana a cash bond in the amount of One Hundred Fifty Dollars (\$150.00) said bond to be conditioned upon the following conditions, to-wit:

I. Grantees, their heirs, administrators, executors, or assigns shall be liable for all property damage, whether through their negligence or that of their agent, or whether such property damage be without fault, resulting from the maintenance or making of repairs for which entry is made.

II. Grantees, their heirs, administrators, executors or assigns shall leave the property upon which entry is made in such condition as it is found, in particular, all sod shall be replaced and road surfaces repaired in an equal and satisfactory manner.

III. Upon the termination of entry for the purpose of repairs or maintenance the bondholder shall return the sum deposited with him as bond to Grantees upon determining that the above described conditions have been fulfilled.

William E. Leach and
Patricia Leach,
husband and wife

to

Albert R. Hutchins and
Vera J. Hutchins,
husband and wife

Convey and Warrant
Consid. \$1.00 and o.v.c.
Dated October 4, 1960
Ack. October 4, 1960 before
N.P. Monroe Co., Ind. (Seal)
Recorded October 5, 1960
Deed Record 136, page 1

A part of the Southwest Quarter of Section Twenty-eight (28), Township Nine (9) North, Range One (1) West. Beginning at a point that is 1870.77 feet North and 489.57 feet East of the Southwest corner of the said Southwest Quarter; thence running North 83 degrees East for 45 feet; thence running North 14 degrees thirty-nine (39) minutes West for 178 feet, more or less, and to the center line of a branch, thence running South for a distance of 172 feet and to the place of beginning. Containing in all 0.088 acres, more or less.

Reserved unto the Grantors herein a perpetual easement over and across the above described land for the maintenance of a water line and water meter to serve the land retained by the Grantors herein.

Original

TRACT ONE:

Part of the Southwest Quarter of Section 28, Township 9 North, Range 1 West, beginning at a point that is 1558.77 feet North and 385.57 feet East of the Southwest corner of the said Southwest Quarter; thence running North 6 degrees West for 426 feet, more or less, and to the center line of a branch; thence running over and along the center line of the said branch the following courses and distances: North 53 degrees East for 63 feet; North 65 degrees East for 66 feet; thence leaving the center line of the said branch and running South 14 degrees 39 minutes East for a distance of 178 feet. Thence, running North 84 degrees East for 171 feet and to the West property line of North College Avenue, (State Road #37 South), thence running over and along the said West property line of North College Avenue (State Road #37 South), the following courses and distances: South 12 degrees and 30 minutes East for 103.5 feet; South 19 degrees East for 103.5 feet; South 21 degrees East for 133.5 feet; thence leaving the West property line of North College Avenue (State Highway #37 South) and running South 65 degrees West for 48.5 feet; thence running South 89 degrees for 223 feet; and to the Northeast corner of Lot Number 3 in the Gordon Fisher Tract, an unrecorded plat. Thence running North 79 degrees west for 27.5 feet; thence running North 87 degrees and 30 minutes West for 125.9 feet, and to the place of beginning.

Subject to any legal highways or rights of way.

New Orleans

TRACT TWO:

A part of Lot No. 4 in Smith's Addition to the City of Bloomington, / the
Monroe County, Indiana, described as follows: Recorder, of
as per plat thereof, recorded in
Plat Book 2, page 46, in the office of

Commencing at a point in the North line of said Lot, 56 feet East of the Northwest corner thereof; thence East 114 feet to the Northeast corner of said Lot; thence South on and along the East line thereof, 76 feet to the Southeast corner thereof; thence West along the South line thereof 114 feet, more or less, to the part of said Lot already owned by Grantors, thence North along the East line of said part of said lot already owned by Grantors to the place of beginning.

RECORDED BY THE SECRETARY OF STATE
FOR THE UNITED STATES OF AMERICA
IN THE CITY OF WASHINGTON, D. C., ON THE
EIGHTH DAY OF JUNE, IN THE TWENTY-THREE
HUNDRED EIGHTY-SEVEN, BY THE
AMERICAN TELEGRAPH COMPANY,
FOR THE USE OF THE
UNITED STATES GOVERNMENT.
THE
SECRETARY OF STATE,
RECORDED
BY
THE
AMERICAN
TELEGRAPH
COMPANY,
FOR
THE
USE
OF
THE
UNITED
STATES
GOVERNMENT.

ARTICLE IV - JURISDICTION

The Plan Commission of Duluth shall have exclusive control over the issuance of all plats and permits within the corporate limits and within the territorial jurisdiction limits of the City of Duluth.

No plan or plat or other site plan or zoning map shall be issued by the City of Duluth or any of its departments or agencies, or by any other authority, unless it has been submitted to the Plan Commission for review and approval. A copy of the original or the approved plan or map shall also bear the Plan Commission's seal.

ARTICLE V - GENERAL PROVISIONS

1. The Plan Commission of Duluth may require any individual, firm, corporation, or association engaged in the construction, sale, erection, demolition, and removal of buildings, structures, improvements and fixtures, to submit a plan showing the proposed building, structure, improvement, fixture, or demolition, in full accordance with the provisions of this ordinance.

2. All plans, maps, and drawings required by this ordinance shall be submitted to the Plan Commission at least one month before the proposed work is to be done.

3. No land shall be subdivided, or any property used for any purpose, without first obtaining a permit from the Plan Commission.

4. All fees, taxes, and expenses of the Plan Commission shall be paid by the person or persons applying for the permit, or option for subdivision.

5. No subdivision, or other use of property, shall be made, or any property used for any purpose, without first obtaining a permit from the Plan Commission.

6. No subdivision, or other use of property, shall be made, or any property used for any purpose, without first obtaining a permit from the Plan Commission.

7. No subdivision, or other use of property, shall be made, or any property used for any purpose, without first obtaining a permit from the Plan Commission.

8. No subdivision, or other use of property, shall be made, or any property used for any purpose, without first obtaining a permit from the Plan Commission.

9. No subdivision, or other use of property, shall be made, or any property used for any purpose, without first obtaining a permit from the Plan Commission.

10. No subdivision, or other use of property, shall be made, or any property used for any purpose, without first obtaining a permit from the Plan Commission.

11. No subdivision, or other use of property, shall be made, or any property used for any purpose, without first obtaining a permit from the Plan Commission.

12. No subdivision, or other use of property, shall be made, or any property used for any purpose, without first obtaining a permit from the Plan Commission.

13. No subdivision, or other use of property, shall be made, or any property used for any purpose, without first obtaining a permit from the Plan Commission.

14. No subdivision, or other use of property, shall be made, or any property used for any purpose, without first obtaining a permit from the Plan Commission.

which are more restrictive, or which impose higher standards or requirements, shall govern.

3. This ordinance is not intended to abrogate any easement, covenant, or any other private agreement, provided that where the regulations of this ordinance are more restrictive, or impose higher standards or requirements, than such easements, covenants or other private agreements, the requirements of this ordinance shall govern.

SECTION VI - RULES AND DEFINITIONS

In the construction of this ordinance, the rules and definitions contained in this section shall be observed and applied, except when the context clearly indicates otherwise.

A. RULES

1. Words used in the present tense shall include the future; and words used in the singular number shall include the plural number, and the plural number the singular.

2. The word "shall" is mandatory and not discretionary.

3. The word "may" is permissive.

4. The word "lot" shall include the words "lot", "plot", "parcel" or "tract".

5. The phrase "used for" shall include the phrases "reserved for", "designated for", "intended for", "maintained for", and "occupied for".

B. DEFINITIONS

1. ALLEY - A public right-of-way primarily for vehicular traffic along the side or rear of properties, which affords only a secondary means of access to adjacent properties.

2. BLOCK - A tract of land bounded by streets, or by a combination of streets and public parks, cemeteries, railroad rights-of-way, corporate boundary lines of the City, or other definite barrier.

3. BUILDING - Any structure designed, built, or intended for the shelter, enclosure or protection of persons, animals, chattels or movable property of any kind.

4. BUILDING SETBACK LINE - The line establishing the minimum open space to be provided between the front line of buildings and the front lot line.

5. CITY - The City of Tahlequah, Indian.

6. CROSSWALK - A public right-of-way located across a block to provide pedestrian access to adjacent streets or alleys.

7. DRIVE-IN LOT - A minor street having one way and one lane leading direct from the outside by a vehicular ramp around.

8. EASEMENT - A grant by a property owner for the use of a strip of ~~land~~ by others for a specific purpose.

10. LOT - A portion of a subdivision or other parcel of land intended as a unit for transfer of ownership or for development.

11. PARKWAY - A route intended to be used primarily by passenger vehicles which may have a varying width of right-of-way and which right-of-way is or is intended to be developed with a park-like character.

12. PLAT - A plan, map, drawing or chart on which the subdivider's plan of the subdivision is presented and which he submits for approval and intends to record in final form.

13. PLAT, FINAL - The drawings and documents presented for final approval and as described in Section VII, "B".

14. PLAT, PRELIMINARY - The drawings and documents presented for conditional approval and as described in Section VII, "A".

15. ROADWAY - The portion of a street available for vehicular traffic and not the street right-of-way width; where curbs are laid, the portion between curbs.

16. STREET - A public right-of-way having the primary purpose of providing for vehicular and pedestrian access to adjacent properties or to other streets. The word "street" refers to the width of the street right-of-way or easement, whether public or private, and shall not be considered as the width of the roadway or paving or other improvement on the street right-of-way.

17. STREET, MAJOR - See "Primary Street".

18. STREET, MARGINAL ACCESS - A street running parallel to and adjacent to or in the immediate vicinity of a major street or highway and which has as its purpose the relief of such major (primary) street or highway from the local service of abutting properties.

19. STREET, MINOR - A street intended primarily as access to abutting properties.

20. STREET, PRIMARY - A street of considerable continuity which serves or is intended to serve as a major traffic artery between the various sections of the Wabash area.

21. STREET, PRIVATE - Any street which is under the jurisdiction of an individual, corporation, or Board of Trustees, or any street which is privately owned or established and has not been dedicated for public use.

22. STREET, PUBLIC - All primary, secondary and minor streets which are shown on the subdivision plat and are, or are to be, dedicated for public use.

23. STREET, SECONDARY - A street which carries traffic from minor streets to the primary street system, and designated as secondary streets on the General Development Plan.

24. SUBDIVISION - Any person, group or corporation acting as a unit or any agent thereof, dividing or proposing to divide land so as to constitute a subdivision as defined herein.

25. SUBDIVISION - The division of any tract or parcel of land into two or more lots or other divisions of land for

building development, or if a new street is involved, any division of such parcel. The sale or exchange of parcels between adjoining lot owners, where such sale or exchange does not create additional building sites, shall not be considered a subdivision. The term includes resubdivision and, where appropriate to the context, shall relate to the process of subdividing or to the land subdivided. Application for permit to construct two or more dwellings on a parcel or tract of land or to construct one or more additional dwellings on a parcel of land where one or more dwellings already exist shall be construed as a building development envisioning future transfer of ownership and shall be regarded as a subdivision.

SECTION VII - PROCEDURE FOR APPROVAL

A. APPROVAL OF PRELIMINARY PLAT

1. The subdivider shall cause to be prepared a preliminary plat together with improvement plans and other supplementary material as specified in Section I (a).

2. Four (4) copies of the preliminary plat and supplementary material specified shall be submitted to the Plan Commission with written application for conditional approval at least 10 days prior to the meeting at which it is to be considered.

3. At the time of filing an application for conditional approval of the preliminary plat, the application shall be accompanied by a certified check or money order payable to the City of Wabash in the amount of twenty-five (25) dollars; upon acceptance of the application by the Plan Commission, the Secretary shall surrender the check or money order to the City Clerk-Treasurer for deposit in the General Fund of the City.

4. Following review of the preliminary plat and other material submitted, the Plan Commission shall, within thirty (30) days and after public hearing and notice as required by law, express its approval as Conditional Approval and state the conditions of such approval, if any, or if disapproved, shall express its disapproval and its reasons therefor.

5. Conditional approval of the Preliminary Layout shall be effective for a maximum period of twelve (12) months, except that submission within this period of a Final Plat applying to a portion of the area covered by the Preliminary Layout shall extend the effective period of conditional approval to a maximum of twenty-four (24) months from the date of submission of the Preliminary Layout. If a Final Plat has not been submitted to the Plan Commission within these time limits, the Preliminary Layout shall again be submitted to the Plan Commission for conditional approval.

6. The action of the Plan Commission shall be noted on two (2) copies of the Preliminary Plat, or attached thereto. One copy shall be returned to the subdivider and the other retained by the Plan Commission.

7. Conditional approval of a Preliminary Plat shall not constitute approval of the Final Plat. It shall only be deemed an expression of approval to the layout submitted on the preliminary plat as a guide to the preparation of the Final Plat which will be submitted for approval of the Plan Commission and for recording upon fulfillment of the requirements of these regulations and the conditions of the conditional approval, if any.

The inhabitants of Lead, including the attorney, character, extent, width, roads and location of all streets, crosswalks, sewers, sites for parks, playgrounds and schools, general Development Plan of the City and other measures and especially by the Common Council and other responsible bodies of the City, as a part of the Master Plan (Master Plan) of the City of Lead.

SCOTT, FORESMAN - THE MOLLYCUE

4. The final plan submitted to the Plan Commission for approval shall be accompanied by a certificate by the City Engineer that the plan complies with the requirements of Section X (B) and conforms to all regulations specified by the Corporation.

3. Four (4) copies of the final plan and other exhibits required for approval shall be prepared as specified in Section X and shall be submitted to the Plan Commission within twelve (12) months after approval of the Preliminary Plan; otherwise, such approvals shall become null and void unless an extension of time is applied for and granted by the Plan Commission.

2. Application for approval of the final plat shall be submitted in writing to the Plan Commission, together with copies of the final plat and certification, at least fifteen days prior to the meeting at which it is to be considered.

1. The fiscal plan shall consist substantially to the preliminary plan as approved, and, if desired by the subscriber, it may contain only that portion of the approved preliminary plan which has proposed to record and develop at the time.

surrounding areas, or;

(b) Conform to a plan for the area or neighborhood approved or adopted by the Plan Commission to meet a particular situation where topographical or other conditions make continuance or conformance to existing streets impracticable.

3. Minor streets shall be so laid out that their use by through traffic will be discouraged.

4. Where a subdivision abuts or contains an existing or proposed expressway or primary street, as shown on the General Development Plan, the Plan Commission may require marginal access streets, reverse frontage with screen planting contained in a nonaccess reservation, at least ten (10) feet wide, along the rear property line, deep lots with rear service alleys, or such other treatment as may be necessary for adequate protection of residential properties and to afford separation of through and local traffic.

5. Where a subdivision borders on or contains a railroad or expressway, the Plan Commission may require a street approximately parallel to and on each side of such railroad or expressway, at a distance suitable for the appropriate use of the intervening land, as for park purposes in residential districts, or for commercial or industrial purposes in appropriate districts. Such distances shall also be determined with due regard for the requirements of approach grades and future grade separations.

6. Reserve strips controlling access to streets or alleys shall be prohibited.

7. All street intersections and cul-de-sacs should encourage safe traffic flow.

8. When connecting street lines deflect from each other at any point by more than ten (10) degrees, they shall be connected by a curve with a radius adequate to insure clear sight distances.

9. Streets shall be laid out so as to intersect as nearly as possible at right angles.

10. Property lines at street intersections shall be rounded with a minimum radius of 25 feet for primary streets and 15 feet for secondary and minor streets. The Plan Commission may permit comparable cut-offs or chords in place of rounded corners.

11. Street right-of-way widths shall be as shown in the General Development Plan and where not shown therein the minimum width shall be 50 feet for residential streets unless otherwise approved by the Plan Commission.

12. Dead streets shall be prohibited, except where essential to the reasonable development of the subdivision in conformity with the other requirements of these regulations or where the owner of the adjoining property agrees to dedicate the other half of the street and do so before the approval of the final plat.

13. Dead-end streets (cul-de-sacs) designated to be permanently, shall not be longer than 100 feet from the intersection

of the origin through the center of the circle to the end of the right-of-way, and shall be provided at the closed end with a turn around having an outside pavement diameter of at least 90 feet and a street property line diameter of at least 120 feet.

14. No street names shall be used which will duplicate or be confused with the names of existing streets. Existing street names shall be projected wherever possible. Street names shall be subject to the approval of the Plan Commission.

15. Street gradients and vertical curves shall be approved by the City Engineer.

16. Street grades shall provide proper relation between the street and the first floor elevation of the houses or buildings to permit convenient and economical access to and drainage of the lots.

B. ALLEYS

1. Alleys in residential areas shall not be permitted, except where deemed necessary, and at the discretion of the Plan Commission.

2. The width of an alley shall be not less than ~~20~~²² feet in residential areas.

3. Sharp angled intersections or sharp changes in alignment shall be avoided, but where unavoidable, corners shall be cut off sufficiently to permit safe vehicular movement.

C. EASEMENTS

1. Easement across lots or centered on rear or side lot lines shall be provided for utilities where necessary and shall be at least 14 feet wide. Additional width shall be provided where necessary to accommodate utility pole bracing.

2. Easements shall be designed to provide continuity from block to block.

3. Where a subdivision is traversed by a water-course, drainage-way, channel, or stream, there shall be provided a storm water easement or drainage right-of-way conforming substantially with the lines of such water course, and such further width or construction, or both, as will be adequate for the purpose as determined by the Plan Commission. Parallel streets or parkways may be required in connection therewith.

D. BLOCKS

1. The lengths, widths, and shapes of blocks shall be determined with due regard to:

- (a) Provision of adequate building sites suitable to the special needs of the type of uses contemplated.
- (b) Zoning requirements as to lot sizes and dimensions.
- (c) Needs for convenient access, circulation, control and safety of street traffic.
- (d) Limitations and opportunities of topography.

2. Pedestrian crosswalks, not less than 8 feet wide, may be provided for access to schools, playgrounds, shopping centers, transportation and other community facilities, when the subdivision does not provide other convenient access.

E. LOTS

1. The lot size, width, depth, shape and orientation, shall be appropriate for the location of the subdivision and for the type of development and use contemplated.

2. Lot dimensions and areas shall conform to the requirements of the Zoning Ordinance. However:

- (a) Residential lots, where not served by public or private sanitary sewer, shall have not less than 16,000 square feet of area.
- (b) Where unusual soil conditions or other physical factors exist which may impair the health and safety of the residents of the neighborhood in which a subdivision may be located, upon recommendation of the State Department of Public Health, the Plan Commission may increase lot area requirements as may be necessary.
- (c) Lots abutting a water course, drainage way, channel or stream shall have additional minimum width or depth as required to provide an adequate building site and afford the minimum usable area required in the Zoning Ordinance for front, rear and side yards.

3. Side lot lines shall be substantially at right angles or radial to street lines.

4. The orientation of platted lots in any existing subdivision shall not be changed without the approval of the Plan Commission and, if approved, shall provide the necessary setback lines and easements for utilities as required herein.

5. Property lines at street intersection corners shall be arcs having radii of at least 25 feet for primary streets and 15 feet for secondary and minor streets, or shall be chords of such arcs.

F. BUILDING SETBACK LINES

Setback lines in residential areas of new subdivisions shall conform to the front yard provisions of the Wahash Zoning Ordinance.

G. OPEN SPACES

In the subdivision of any land within or adjacent to the City, due regard shall be shown for all natural features, such as tree growth, water courses, historic spots or similar conditions which, if preserved, will add attractiveness and value to the proposed development.

SECTION IX - REQUIRED LAND IMPROVEMENTS

Before considering the approval of any subdivision, a final plat shall be submitted as provided in SECTION VII, Paragraph E, 4. This plat shall meet the minimum requirements for

all ordinances of the City of Vabash and shall conform to the following:

A. MONUMENTS AND MARKERS

1. Monuments shall be placed at all corners and angle points of the outside boundary but no further than one thousand (1000) feet apart. The monuments shall be of concrete, not less than 6 inches in diameter and 36 inches deep with a copper or bronze dovel 3 inches long and 1/2 inch in diameter cast in place. Wrought iron bars or pipe 3/4 inch in diameter and 48 inches long shall be set in concrete at the corners of all street intersections. The monuments, bars or pipes shall be set level with the finished grade.

B. UTILITY AND STREET IMPROVEMENTS

1. Gas, water and electric utility service shall be made available for all lots.

2. All streets shall have a minimum width of 22 feet and all alleys shall have a minimum width of 12 feet, and all streets and alleys shall be improved with the kind of paving and of such width as shall meet the standard requirements of the City of Vabash.

3. Sanitary sewers shall be provided for all lots and of such size and grades and of such materials as are required by the specifications of the City of Vabash and shall be subject to the approval of the City Engineer.

4. Prior to approval of the plat by the Pine Commission, the subdivider shall pay to the City of Vabash the amount of sewer connection charge or charges in accordance with the schedule of connection charges in effect at that time; these charges to cover all sanitary sewer services, other than rental, to be provided within the development or part under consideration.

5. Systems of street drainage and disposal of storm waters so as to prevent flooding of streets shall be provided in accordance with the requirements of the City Engineer.

6. All parkway stripes shall be graded and planted with grass seed according to City Standards.

7. Detailed plans of all paving and sewer improvements shall be submitted to the City Engineer for approval and such approval shall be in writing before any construction of streets or alleys are begun. The plans shall be prepared by a Registered Civil Engineer of the State of Indiana and shall bear his seal and engineering signature. In the case of paving, there shall be a copy of paving standards to be the control of the Indiana Department of Health.

8. All public improvements which will become part of the city's public sewer system, all storm sewers and appurtenances (and all public sidewalks) shall be subject to the requirement that the City of Vabash by the Board of Public Works and Safety, make formal acceptance of same in writing for the maintenance of such improvement after the City Engineer shall have certified that such improvements have been properly made in accordance with the City's requirements and that they are found satisfactory.

SECTION X - PLATS AND DATA

A. PLATS AND DATA FOR CONDITIONAL APPROVAL

1. Application for conditional approval of a subdivision shall be in writing and shall state:

- (a) Name of subdivision and name of owner of tract.
- (b) A general description of the terrain and the soil formation.
- (c) The improvements which it is proposed to install.
- (d) The proposed method of serving the subdivision with sanitary and storm water sewers.
- (e) Proposed protective covenants.

2. The application shall be accompanied by a Preliminary Plan of the proposed subdivision, showing:

- (a) The location and area of the subdivision.
- (b) The legal description of lots.
- (c) Boundary lines of the subdivision with length and bearings of lines.
- (d) The location of any canals and of any existing streets, highways, railroads, watercourses, etc., or other physical installations bordering or within the proposed subdivision.
- (e) Existing permanent buildings or structures within the tract.
- (f) The street and lot layout of the proposed subdivision showing street widths and names, lot widths and depths and numbers of lots.
- (g) Minimum front and side setback lines.
- (h) Contours with vertical intervals of ten (10) feet or less referred to sea level datum.
- (i) Proposed school, park or playground sites to be reserved, if any.

3. Four copies of plats and data required above shall be furnished.

B. PLATS AND DATA FOR FINAL APPROVAL

1. The final Plat shall be done in ink on tracing cloth or other translucent material of equal strength and durability and shall be at a minimum scale of 100 feet to 1 inch. Where necessary, the plat may be on several sheets accompanied by an index sheet or legend showing the entire subdivision. For large subdivisions, the final plat may be submitted for approval progressively in contiguous sections satisfactory to the Plan Commission.

2. The final plat shall show the following:

- (a) Name of subdivision.
- (b) Location by section, township and range.
- (c) Title, scale, northarrow, and date.
- (d) Location and description of monuments.
- (e) Tract boundary lines, right-of-way lines of streets, easements and other rights-of-way, property lines of residential lots and other sites with accurate dimensions of each, bearings and deflection angles and radii, arcs, central angles and tangent lengths of all curves.
- (f) Name and right-of-way width of each street or other right-of-way.
- (g) Number to identify each lot or site.
- (h) Purpose for which sites, other than residential lots, are dedicated or reserved.
- (i) Proposed building setback line on all lots and other sites.
- (j) Statement by owner dedicating streets, rights-of-way and any sites for public uses.
- (k) Certification of title showing that applicant is land owner and that it is free of tax and assessment delinquencies.
- (l) Certification by surveyor or engineer, certifying to accuracy of survey and plat.
- (m) Certification form for approval by Plan Commission.

3. Two (2) copies of the final plat shall be furnished in addition to the original tracing.

4. Two (2) copies of protective covenants shall be furnished in form for recording.

5. Such other certificates, affidavits, or endorsements, shall be presented as may be required by the Plan Commission in the enforcement of these regulations.

SECTION XI - CERTIFICATES AND COVENANTS

The following forms shall be used in connection with approval of the final plates:

A. CERTIFICATES

1. By the Plan Commission

Approved by the Plan Commission of the City of Wabash at a meeting held _____.

President

Seal

Secretary

Advertisement by the City Engineer this day of

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By the Professional Engineers

Each final plat submitted to the Plan Commission for approval shall carry a certificate signed by a Registered Professional Engineer (or Registered Land Surveyor) in substantially the following form:

... hereby certify
that I am a registered professional engineer (or,
registered land surveyor) licensed under the laws
of the State of Indiana; that I have made a survey
of the lands shown and described herein and sub-
divided same as shown on the plat herein drawn; that
this plat correctly represents said survey and that
all dimensions, linear and angular, are correctly
known; and that all monuments, or markers shown
thereon actually exist and that their location, size
and description are accurately given.

WILLIAM HENRY SPRATT, 1811-1891

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Indiana Registration No.

4. By Owner - Deed Dedication

Each final plat submitted to the Plan Commission for approval shall carry a deed of dedication in substantially the following form:

I (or we), the undersigned owner or owners of the real estate shown and described herein, do hereby certify that I (or we) have laid out, platted and subdivided, and do hereby lay out, plat and subdivide said real estate in accordance with this plat.

This subdivision shall be known and designated as _____, to the City
of _____.

All streets, alleys and crosswalks shown and not heretofore dedicated, are hereby dedicated to the public.

Building setback lines are hereby established as shown on this plat, between which lines and the property lines of the streets, there shall be erected or maintained no building or structure.

Strips of land of various widths as shown on this plat and marked "Easement" are reserved for the use of public utilities for the installation of water and sewer

titles, channels, channels, paths, charts, supplies,
and other public lands and waters, subject to the
rights of ownership and to the zoning herein
described.

ARTICLE V

ARTICLE V. THE STATE OF INDIANA AND THE COUNTY OF MARION

ARTICLE V. THE STATE OF INDIANA AND THE COUNTY OF MARION
shall be bound by all portions
of this article, except section 1, 19
(a) (ii) (iii) (iv) (v) (vi) (vii) (viii) (ix)
(x) (xi) (xii) (xiii) (xv) (xvi) (xvii) (xviii)
(xix) (xx) (xxi) (xxii) (xxiii) (xxiv) (xxv)
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(a) (ii) (iii) (iv) (v) (vi) (vii) (viii) (ix)
(x) (xi) (xii) (xiii) (xv) (xvi) (xvii) (xviii)
(xix) (xx) (xxi) (xxii) (xxiii) (xxiv) (xxv)
(xxvi) (xxvii) (xxviii) (xxix) (xxxi) (xxxi)
(xxxi) (xxxi) (xxxi) (xxxi) (xxxi) (xxxi)

IN WITNESS whereof, I have signed this day of

Seal

Signature

Signature

STATE OF INDIANA)

COUNTY OF MARION)

SS:

Before me, the undersigned Notary Public in and
for the County and State, personally appeared
, and
, and each separately and severally rec-
ognized the signature of the former on the instrument or
his or her voluntary act and deed, for the purposes
therein expressed.

WITNESS my hand and seal this _____ day of
19_____

My Commission Expires:

Notary Public

SECTION XII - APPENDIX

This section contains the following forms and tables which
will assist in the preparation of applications as required by law.

FORM OF THE COMMISSIONER'S CERTIFICATE

19
Winnipeg - Manitoba

APPENDIX

APPENDIX

I certify certify that the foregoing affidavit was
sworn at a meeting of the Common Council of the City of Winnipeg,
Manitoba, held at _____ o'clock _____ M. (P.) on the
day of 19

Clerk-Treasurer

GENERAL ORDINANCE NO. 8, 1950

AN ORDINANCE ESTABLISHING A ZONING PLAN FOR THE CITY OF WABASH AND CONTIGUOUS UNINCORPORATED TERRITORY EXTENDING TWO MILES BEYOND THE CORPORATE LIMITS OF WABASH TO CONSERVE THE VALUE OF PROPERTY AND TO THE END THAT ADEQUATE LIGHT, AIR, CONVENIENCE OF ACCESS, AND SAFETY FROM FIRE, AND OTHER DANGERS MAY BE SECURED; THAT CONGESTION IN THE PUBLIC STREETS MAY BE LESSENED OR AVOIDED; AND THAT THE PUBLIC HEALTH, SAFETY, COMFORT, MORALS, CONVENIENCE AND GENERAL PUBLIC WELFARE MAY BE PROMOTED IN A MANNER WHICH RECOGNIZES THE NEEDS OF INDUSTRY AND BUSINESS IN THE FUTURE GROWTH OF THE CITY AND ITS ENVIRONS AND WILL ENCOURAGE THE DEVELOPMENT OF HEALTHY SURROUNDINGS FOR FAMILY LIFE IN RESIDENTIAL NEIGHBORHOODS; ALL IN ACCORDANCE WITH A MASTER PLAN DESIGNED TO ASSURE EFFICIENCY AND ECONOMY IN THE PROCESS OF DEVELOPMENT OF THE CITY AND ITS ENVIRONS, AND FOR THE PURPOSE OF:

- (1) Classifying, regulating and limiting the height, area, bulk and use of buildings hereafter to be erected;
- (2) Regulating and determining the area of front, rear and side yards and other open spaces about buildings;
- (3) Regulating and determining the use and intensity of use of land and lot areas;
- (4) Classifying, regulating and restricting the location of trades, callings, industries, commercial enterprises and the location of buildings designed for specified uses;
- (5) Dividing the city into districts of such kind, character, number, shape and area as may be deemed necessary to carry out the purposes of this ordinance;

to provide for administration and for penalties for the violation of its provisions; authorizing the creation of a board of zoning appeals and providing for review of the decisions of such board by the court. This ordinance, and ordinances supplemental or amendatory thereto, shall be known as the Zoning Ordinance of Wabash.

Be it Ordained by the Common Council of the City of Wabash:

ARTICLE 1. IN GENERAL

SECTION 1. INTERPRETATION. In interpreting and applying the provisions of this Ordinance, they shall be held to be the minimum requirements for the promotion of the public health, safety, comfort, morals convenience and general welfare.

SECTION 2. NON-INTERFERENCE WITH GREATER RESTRICTIONS OTHERWISE IMPOSED. It is not intended by this Ordinance to interfere with, or abrogate or annul any easements, covenants, or other agreements between parties, nor to interfere with, or abrogate or annul any ordinances, other than expressly repealed hereby, rules, regulations, or permits previously adopted or issued, and not in conflict with any of the provisions of this ordinance, or which shall be adopted or issued, pursuant to law, regarding the use of buildings or land; provided, however, that where this ordinance imposes a greater restriction upon the use of buildings or land, or upon the height of buildings, or requires larger open spaces or greater lot area per family, than are required by or imposed by such easements,

covenants or agreements between parties, or by such ordinances, rules, regulations, or permits, the provisions of this ordinance shall control.

SECTION 3. DEFINITIONS. For the purpose of this Ordinance, certain terms and words are hereby defined as follows:

Words in the present tense include the future and vice versa; words in the singular number include the plural number and vice versa; the word "Building" includes the word "structure" and vice versa; the word "shall" is mandatory and not directory.

ACCESSORY BUILDING: A subordinate building, or a portion of a main building, the use of which is incidental to that of the main building.

ACCESSORY USE: A use which is incidental to the main use of the premises.

ALLEY: A public thoroughfare, which affords only secondary means of vehicular access to abutting property, and not over twenty (20) feet in width.

BASEMENT: A story, wholly or partly underground, which unless subdivided into rooms and used for tenant purposes, shall not be included as a story for the purpose of height measurement.

BLOCK: Property having frontage on one side of a street and lying between the two nearest intersecting or intercepting streets, or nearest intersecting or intercepting street and railroad right of way or waterway.

BUILDING: A structure having a roof supported by columns or walls, for the shelter, support, enclosure or protection of persons, animals, chattels or property. When separated by party walls, without openings through such walls, each portion of such a building shall be considered a separate structure.

BUSINESS: The engaging in the purchase, sale, barter or exchange of goods, wares, merchandise or services, the maintenance or operation of offices, or recreational and amusement enterprises for profit.

CAMP, PUBLIC: Any area or tract of land used or designed to accommodate two (2) or more automobile house trailers, or two (2) or more camping parties, including cabins, tents or other camping outfits. See also MOTEL OR TOURIST LODGE.

COMMERCIAL: See BUSINESS.

DISTRICT: A section of the City of Wabash or of the Two-mile Territorial Jurisdictional Area, for which uniform regulations governing the use, height, area, size and intensity of use of buildings and land, and open spaces about buildings, and herein established.

FAMILY: A group of one or more persons occupying a building and living as a single housekeeping unit. No unrelated group living as a single housekeeping unit shall consist of more than six (6) persons, as distin-

uished from a group occupying a lodging house or hotel.

GARAGE, PRIVATE : An accessory building with capacity for not more than three (3) motor vehicles for storage only, not more than one (1) of which may be a commercial vehicle of not more than three (3) tons capacity. Provided however that a garage designed to house one(1) motor vehicle for each family housed in an apartment shall be classed as a private garage.

GARAGE, PUBLIC: Any building or premises, except those defined herein as a Private Garage, used for the storage, or care of motor vehicles, or where such vehicles are equipped for operation, repaired, or kept for remuneration, hire or sale.

HOTEL: A building in which lodging is provided and offered to the public for compensation, and which is open to transient guests, in contradistinction to a boarding or lodging house.

KENNEL: Any lot or premises on which four (4) or more dogs, at least four (4) months of age, are kept.

LOT: A parcel of land occupied or intended for occupancy by a use permitted in this Ordinance, including one (1) main building and its accessory building and its accessory buildings, and the open spaces required by this Ordinance, and having its principal frontage on a street, or an officially designated and approved place.

LOT, CORNER: A lot abutting upon two (2) or more streets at their intersection.

LOT, DEPTH OF: The mean horizontal distance between the front line and the rear line of the lot.

LOT, GROUND LEVEL:

a. For buildings having walls adjoining one street only, the elevation of the sidewalk at the center of the wall adjoining the street.

b. For buildings having walls adjoining more than one street, the average of the elevation of the sidewalk at the center of all walls adjoining the streets.

c. For buildings having no wall adjoining the street, the average level of the ground adjacent to the exterior walls of the building.

Any wall approximately parallel to and not more than five (5) feet from a street line is to be considered as adjoining the street.

LOT, INTERIOR: A lot other than a Corner Lot or Through Lot.

LOT LINE, FRONT: In the case of an interior lot, a line separating the lot from the Street or place; and in the case of a corner lot a line separating the narrowest street frontage of the lot from the street, except in cases where deed restrictions in effect specify another line as the front lot line.

LOT LINE, REAR: A lot line which is opposite and most distant from the front lot line and, in the case of an irregular or triangular shaped lot, a line ten (10) feet in length within the lot, parallel to and at the maximum distance from the front lot line.

LOT LINE, SIDE: Any lot boundary line not a front lot line or a rear lot line.

LOT, THROUGH: A lot having frontage on two streets at opposite ends of the lot.

MOTEL: A building or group of buildings, in which lodging is provided and offered to the public for compensation, and catering primarily to the public travelling by motor vehicle.

NONCONFORMING USE: A building or premises which does not conform in its use or otherwise with all of the regulations of the district in which such building or premises is located.

PARKING LOT: A parcel of land devoted to unenclosed parking for five (5) or more motor vehicles for compensation or otherwise.

PLACE: An open unoccupied space other than a street or alley, permanently reserved for use as the principal means of access to abutting property.

STORY: That portion of a building, included between the surface of any floor and the surface of the floor next above it. If there is no floor above it, then the space between such floor and the ceiling next above it shall be the story.

STORY, HALF: That portion of a building under a sloping gable, hip, or gambrel roof, the wall plates on at least two opposite exterior walls of which are not more than three (3) feet above the floor level of such half-story.

STREET: A public thoroughfare twenty (20) feet or more in width between property lines, which affords principal means of vehicular access to abutting property.

STRUCTURE: Anything constructed or erected, the use of which requires more or less permanent location on the ground, or which is attached to something permanently located on the ground.

STRUCTURAL ALTERATION: Any change in the supporting members of a building, such as bearing walls or partitions, columns, beams, or girders, or any substantial change in the roof or in the exterior walls.

TWO*MILE TERRITORIAL JURISDICTIONAL AREA: The contiguous unincorporated territory extending two miles beyond the corporate limits of the City of Wabash, as shown on a map and resolution delineating such area on file in the office of the Recorder of Wabash County, Indiana.

ZONE: Same as DISTRICT.

ARTICLE II. DISTRICTS AND ZONE MAP

SECTION I. DISTRICTS. The City of Wabash and the Two-mile Territorial Jurisdictional Area are hereby divided into eight (8) districts in order to carry out the purposes of this ordinance. The districts shall be known and designated throughout the ordinance as follows:

NAME OF DISTRICT

DESIGNATION HEREINAFTER

"S"	Suburban District	"S"
"A"	Residential District	"A"
"B"	Residential District	"B"
"C"	Residential District	"C"
"LB"	Local Business District	"LB"
"GB"	General Business District	"GB"
"LI"	Limited Industrial District	"LI"
"HI"	Heavy Industrial District	"HI"

SECTION 2. ZONE MAPS. The Zone Map and the Two-mile Jurisdictional Area Zone Map accompany and are hereby declared to be parts of this ordinance. The Zone Maps show the areas covered by the above districts. Notations, references, indications and other matters shown on the Zone Maps are as much parts of this ordinance as if they were fully described in the text of the ordinance.

SECTION 3. DETERMINATION AND INTERPRETATION OF DISTRICT BOUNDARIES. In determining the boundaries of districts, and establishing the regulations applicable to each district, due and careful consideration has been given to existing conditions, the character of buildings erected in each district, the most desirable use for which the land in each district may be adapted, and the conservation of property values throughout the city.

Where uncertainty exists as to the exact boundaries of any district as shown on the Zone Maps, the following rules shall apply:

a. Where district boundaries are indicated as following street, alley or lot lines, or approximately along such lines, such lines shall be construed to be the district boundaries.

b. In unsubdivided areas, or where a district boundary subdivides a lot, the exact location of the boundary shall be determined by use of the scale of the Zone Maps.

c. In the case of further uncertainty, the Board of Zoning Appeals shall interpret the intent of the Zone Maps as to the location of the boundary in question.

SECTION 4. PROCEDURE RELATING TO ANNEXED OR VACATED AREAS. Territory which may hereafter be annexed to the City of Shall immediately be included in the "A" Residence District, until the required amendment to this ordinance has been adopted.

Whenever any street, alley, public way, railroad right of way, waterway, or other similar area is vacated by proper authority, the districts adjoining each side of such street, alley, public way, railroad right of way, waterway, or other similar area, shall be extended automatically to the center of such vacation and all area included in the vacation shall then and thenceforth be subject to all appropriate regulations of the extended districts.

ARTICLE III. GENERAL PROVISIONS, CHARTS AND SPECIFICATIONS

SECTION I. USE. No building or land shall be used and no building shall be erected, reconstructed or structurally altered, which is arranged, intended or designed to be used for any purpose other than a use which is permitted and specified in a district in which such building or land is located.

SECTION 2. HEIGHT. No building shall be erected, reconstructed or structurally altered, to exceed in height the limits established and specified for the use and the district in which such building is located.

SECTION 3. YARDS, LOT AREA AND SIZE OF BUILDING. No building shall be erected, reconstructed or structurally altered in any manner which will encroach upon, or reduce in any manner, the yards, lot area per family, or size of building regulations, or increase the percentage of occupancy of the lot by buildings regulations, established and specified for the use and the district in which such building is located.

SECTION 4. LOTS. Every building hereafter erected shall be located on a lot which fronts on a street or place, provided that the requirements of this section shall not apply to farm residences or farm buildings.

SECTION 5. VEHICLE PARKING SPACE; LOADING AND LOADING BERTHS. Every building hereafter erected shall provide off-street parking space for motor vehicles and loading and unloading berths as specified herein-after for the use to which such building is to be devoted.

SECTION 6. CHARTS AND SPECIFICATIONS. The following Charts and the specifications outlined thereon are hereby declared to be parts of this ordinance:

CHART 1 - SINGLE-FAMILY DWELLING
CHART 2 - TWO-FAMILY DWELLING
CHART 3 - GROUP HOUSE
CHART 4 - APARTMENT
CHART 5 - CONTIGENT USES
CHART 6 - LOCAL BUSINESS USES
CHART 7 - GENERAL BUSINESS USES
CHART 8 - LIGHT INDUSTRIAL USES
CHART 9 - LIMITED INDUSTRIAL USES
CHART 10 - HEAVY INDUSTRIAL USES

Each chart shows the district or districts in which the use, which is the subject of the Chart, is permitted, and delineates the specifications for:

Lot Area per Family
Width of Lot
Height of Building
Vehicle Parking Space
Front, Side, Rear and Other Yards
Building Area
Vision Clearance
Accessory Buildings and uses

applicable to the particular use in each district where such use is authorized.

ARTICLE IV. CONDITIONAL USES

SECTION 1. PERMITS FOR CONDITIONAL USES.

a. The following uses, or structural alterations thereto, which are classified as Conditional Uses, may be permitted by the Board of Zoning Appeals, in accordance with the procedure specified herein:

Airport or Aircraft Landing Field
Amusement Park
Baseball Park
Cemetery or Crematory
Country Club or Golf Course
Fair Ground
Hospital
Motel or Tourist Lodge
Outdoor Theater
Penal or Correctional Institution
Philanthropic or Charitable Institution
Race Track
Sanitary Fill or Refuse Dump
Sewage or Garbage Disposal Plant
Trailer or Public Camp

b. Upon receipt of an application for a Conditional use by the Board of Zoning Appeals, it shall be referred to the City Plan Commission for investigation as to the manner in which the proposed location and character of the Conditional Use will affect the Master Plan of the City. The City Plan Commission shall report the results of its study of the proposal to the Board of Zoning Appeals, and, if the report is favorable to the proposal, the Board of Zoning Appeals, may, after public notice and hearing according to law, grant the permit, including the imposition of conditions of use, which the Board deems essential to insure that the Conditional Use is consistent with the spirit, purpose and intent of this ordinance, will not substantially and permanently injure the appropriate use of neighboring property, and will substantially serve the public convenience and welfare.

c. The following uses may be permitted in the "HI" Heavy Industrial District only in accordance with the procedure specified in paragraph b. of this Section and the inclusion of a report by the City Health Officer or the State Board of Health that the use applied for will not be injurious to the public health or safety:

Acid Manufacture
Arsenal
Cement, Lime, Gypsum or Plaster of Paris Manufacture
Distillation of Bones, Coal or Wood
Explosives Manufacture or Storage
Incineration or Reduction of Garbage, Dead Animals,
Offal or Refuse, except for Municipal Purposes
Packing Plants or Slaughter Yards
Slag, Stone, Cinder, or Coal Crushing or Pulverizing
Any other use which may, under some circumstances be
injurious to public health or safety, but which
may, with adequate safeguards, be designed so as
not to be injurious in such manner.

ARTICLE V. NON-CONFORMING USE SPECIFICATIONS

SECTION 1. CONTINUATION THEREOF AND RECONSTRUCTIONS. The lawful use of a building or premises, existing at the time of passage of this ordinance, may be continued although such use does not conform to all of the provisions of this ordinance, except as hereinafter provided.

SECTION 2. EXTENSION. A non-conforming use may be extended throughout a building provided no structural alterations are made therin, except those required by law.

SECTION 3. CHANGE. A non-conforming use may be changed to another non-conforming use of the same or greater restrictions, provided no structural changes are made in the building. Whenever a non-conforming use has been changed to a conforming use or to a use permitted in a district of greater restrictions, it shall not thereafter be changed to a non-conforming use or a less restricted use.

SECTION 4. NON-COMFORMING USE CREATED BY AMENDMENT. These provisions apply in the same manner to a use which may become a non-conforming use due to a later amendment to this ordinance.

SECTION 5. ERECTION AND RE-ERECTION OF BUILDINGS. No building shall be erected upon any premises devoted to a non-conforming use, and no building located upon any such premises, which has been damaged by fire or other causes to the extent of more than seventy-five (75) per cent of its appraised valuation, shall be repaired or rebuilt, except in conformity with regulations of this ordinance.

SECTION 6. TEMPORARY PERMITS. The Board of Zoning Appeals may authorize, by written permit, in a residential district for a period of not more than one (1) year from the date of such permit, a temporary building for commercial or industrial use incidental to the residential construction and development of said district.

SECTION 7. RIGHT TO CONSTRUCT IF PERMIT ISSUED. Nothing herein contained shall require any change in the plans, construction or designated use of a building for which a building permit has been heretofore issued and the construction of which has been diligently prosecuted within ninety (90) days of the date of such permit and which entire building shall be completed according to such plans, as filed, within three (3) years from the date of passage of this ordinance.

SECTION 8. USE TO CONFORM AFTER DISCONTINUANCE. In the event that a non-conforming use of any building or premises is discontinued for a period of one (1) year, the use of the same shall thereafter conform to the uses permitted in the district in which it is located.

SECTION 9. DISCONTINUANCE OF NON*CONFORMING USE OF LAND. The lawful use of land for storage purposes, which does not conform to the provisions of this ordinance, shall be discontinued within five (5) years from the date of passage of this ordinance, and the use of land for storage purposes, which may become a non-conforming use by reason of an amendment to this ordinance, shall be discontinued within five (5) years from the date of passage of such amendment.

ARTICLE VI. VEHICLE PARKING SPACE

SECTION 1. SPECIFIC REQUIREMENTS.

a. The charts numbered from 1 to 10, inclusive, described in Article III of this ordinance, specify the off-street parking requirements for each type of use permitted under this ordinance.

SECTION 2. PERMITS FOR PARKING LOTS.

a. In order to meet requirements for vehicle parking space, where such space is not available on the lot occupied by a building, as specified in Charts 5 to 10, inclusive the Board of Zoning Appeals may, after receipt of a favorable report from the City Plan Commission on the Proposal, and after public notice and hearing, grant a permit for the establishment of a parking lot, in a residence or suburban district, provided that the entire area of the parking lot is within three hundred (300) feet of an "LB", "GB", "LI", or "HI" district, or, in the case of a church or other place of congregation in a residence district, immediately adjacent to such church or other place of congregation, and provided further that:

(1) There shall be no sales, dead storage, repair work, dismantling or servicing of any kind on said parking lot.

(2) Entrances and exits shall be approved as to location by the City Plan Commission.

(3) No parking shall be permitted between the front yard line and the front lot line.

(4) Except for approved entrances and exits, a masonry wall, not more than five (5) feet in height and not less than four (4) feet in height and not less than six (6) inches in thickness, shall be erected so as to conform with the required line and may be required along boundaries of the parking lot as determined by the City Plan Commission for the protection of adjoining residentially zoned property.

(5) The lot shall be paved with a dust-proof or hard surface meeting the standard specifications of the City.

(6) No advertising signs shall be erected upon such lot, except not more than one (1) sign on each street side to indicate the operator and purpose of the lot. Such sign shall not exceed twenty (20) square feet in area and shall not extend more than ten (10) feet in overall height above the ground.

(7) Lighting facilities, if provided, shall be so arranged as to be reflected away from residentially zoned property.

(8) If at any time after the issuance of the required permits any of the provisions of this Section are not complied with the permits shall be revoked.

ARTICLE VII. UNIT DEVELOPMENT PLAN

SECTION 1. RESIDENTIAL DEVELOPMENT PLAN.

a. The owner or owners of any tract of land, comprising an area of not less than ten (10) acres, may submit to the Board of Zoning Appeals a plan for the use and development of the land, primarily for residential purposes. The proposed development plan shall be submitted to the City Plan Commission for examination, study and report and for a public hearing. If the City Plan Commission approves the development plan, together with the recommendations of the City Plan Commission shall be embodied in a report to the Board of Zoning Appeals, stating the reasons for the approval of the plan and application, and specific evidence and facts show-

ing that the proposed Residential Development Plan has considered and made provision for the following essential elements:

That the appropriate use of property adjacent to the area included in the plan will be fully safeguarded;

That the plan is consistent with the intent of this ordinance to promote public health, safety and the general welfare;

That the buildings shall be used primarily for single-family or two-family dwellings, apartments or group houses, and the usual accessory uses such as garages, storage space and community activities.

That the area of the tract, excluding street area, but including the area to be devoted to parks, parkways, and other open spaces, will provide the minimum lot area per family, counting all families to be housed under the Unit Development Plan, which is required for the most intensive use normally permitted in the district in which such development is to be located.

b. If the Board of Zoning Appeals approves the proposed Residential Development Plan, building permits and improvement location permits shall be issued, even though the use of the land, the location of the buildings, to be erected in the area, and the yards and open spaces provided in the plan do not conform in certain respects to the regulations for the district in which the development is to be located.

SECTION 2. COMMUNITY SHOPPING CENTER DEVELOPMENT PLAN.

a. The owner or owners of any tract of land, comprising an area of not less than four (4) acres, may submit in similar manner, a Development Plan for a Community Shopping Center, which shall be processed in the manner prescribed in Section 1, a., herein and may be approved if the report of the City Plan Commission shows that:

The commercial uses included in the plan are limited to those permitted in the "LB" District;

The entire development is designed as a single architectural unit, with appropriate landscape architectural treatment of the entire unit area;

That at least twice the gross floor area of the stores to be included within the development, plus one vehicle parking space of two hundred fifty (250) square feet for each six (6) seats in any theater or place of congregation included within the plan is provided in off-street parking areas, which are integral parts of the design of the unit plan;

That the appropriate use of property adjacent to the area included in the plan will be fully safeguarded;

That the plan is consistent with the intent of this ordinance to promote the public health, safety and general welfare.

b. If the Board of Zoning Appeals approves the proposed Development Plan for a Community Shopping Center, building permits and improvement location permits shall be issued as prescribed in Section 1, b., herein.

SECTION 3. GROUPS OF SMALL HOUSES.

a. Where it is proposed in the "S" Suburban District to erect groups of ten (10) or more dwellings; the minimum ground floor areas of any of which are less than six hundred fifty (650) square feet, a development plan may be submitted and processed in the manner prescribed in Section 1., a., herein, and may be approved if the report of the City Plan Commission shows that:

The appropriate use of property adjacent to the area included in the plan will be fully safeguarded;

Adequate sanitary facilities are provided;

The plan is consistent with the intent of this ordinance to promote public health, safety, and general welfare.

b. If the Board of Zoning Appeals approves the proposed Development Plan, building permits and improvement location permits shall be issued as prescribed in Section 1. b., herein.

ARTICLE VIII. BOARD OF ZONING APPEALS

SECTION 1. ESTABLISHMENT

a. A Board of Zoning Appeals is hereby established. The word "Board" when used in this ordinance, shall be construed to mean the Board of Zoning Appeals.

SECTION 2. COMPOSITION AND APPOINTMENT.

a. The Board shall be composed of five (5) members, all of whom shall be residents of the City, and none of whom shall hold other elective or appointive office, except that two (2) of the five (5) members shall be appointed from the City Plan Commission's Citizen membership. Of the original five members, two shall be appointed to serve for four (4) years; one for three (3) years; one for two (2) years; and one for one (1) year. Terms of these members shall expire on the first day of January of the first, second, third or fourth year, respectively, following their appointment. Thereafter, as terms expire, each new appointment shall be for a term of four (4) years. All members of the Board shall be appointed by the Mayor.

SECTION 3. ORGANIZATION.

a. At the first meeting of each year, the Board shall elect a Chairman and a vice-chairman from among its members, and it may appoint and fix the compensation of a secretary and such employees as are necessary for the discharge of its duties all in conformity to and compliance with salaries and compensations theretofore fixed by the Common Council.

SECTION 4. RULES OF PROCEDURE.

a. The board shall adopt rules for its procedure consistent with the provisions of the Planning Act of 1947, which is Chapter 174 of the Acts of the Indiana General Assembly of 1947.

SECTION 5. MEETINGS AND RECORDS.

a. All meetings of the Board shall be open to the public. The Board shall keep minutes of its proceeding, keep records of its examinations and other official actions, prepare findings, and record the vote of all action taken. All minutes and records shall be filed in the office of the Board and shall be a public record.

SECTION 6. APPEALS FROM BUILDING INSPECTOR.

a. Any decision of Building Inspector made in enforcement of this ordinance may be appealed to the Board of Zoning Appeals by any person claiming to be adversely affected by such decision.

SECTION 7. POWERS AND DUTIES OF THE BOARD

a. The Board shall have the following powers and it shall be its duty to:

(1) Hear and determine appeals from and review any order, requirement, decision or determination made by the Building Inspector in the enforcement of this ordinance.

(2) Permit and authorize exceptions to the district regulations only in the classes of cases or in particular situations as specified in this ordinance.

(3) Hear and decide special exceptions to the terms of the ordinance upon which the Board is required to act under this ordinance.

(4) Authorize upon appeal in specific cases such variance from the terms of this ordinance as will not be contrary to the public interest, where owing to special conditions, fully demonstrated on the basis of the facts presented, a literal enforcement of the provisions of the ordinance will result in unnecessary hardship, and so that the spirit of this ordinance shall be observed and substantial justice done.

b. In exercising its powers, the Board may reverse or affirm, wholly or partly, or may modify the order, requirement, decision or determination appealed from, as in its opinion ought to be done in the premises, and to that end shall have all the powers of the Building Inspector from whom the appeal is taken.

c. The Board shall hear and determine appeals in the manner prescribed in Sections 78 to 81, inclusive, of the Planning Act of 1947, Chapter 174 of the Acts of the Indiana General Assembly 1947.

SECTION 8. RESTRICTIONS ON BOARD ACTION.

a. Every decision of the Board shall be subject to review by certiorari, as prescribed in Section 82 to 88, inclusive, of the Planning Act of 1947, referred to above.

b. No variance in the application of the provisions of this ordinance shall be made by the Board relating to buildings, land or premises now existing or to be constructed, unless after a public hearing, the Board shall find that such variance will not:

(1) Impair the adequate supply of light and air to adjacent property.

(2) Increase the hazard from fire, flood and other dangers of said property.

(3) Diminish the marketable value of adjacent land and buildings.

(4) Increase the congestion in the public streets.

(5) Otherwise impair the public health, safety, comfort and general welfare.

ARTICLE IX. ADMINISTRATION.

SECTION 1. ENFORCEMENT BY WHOM. The Building Inspector is hereby designated and authorized to enforce this Ordinance.

SECTION 2. PLATS. Each application for a building permit shall be accompanied by a plat, in duplicate, drawn to scale, showing the actual dimensions of the lot to be built upon, the size of the building to be erected, reconstructed or structurally altered, and such other information as shall be necessary to provide for the enforcement of this Ordinance. A careful record shall be kept of all such applications and plats, in the office of the Building Inspector.

SECTION 3. IMPROVEMENT LOCATION PERMITS.

a. No land shall be occupied or used and no building hereafter erected, reconstructed or structurally altered shall be occupied or used, in whole or part, for any purpose whatsoever, until an Improvement Location Permit shall have been issued by the Building Inspector stating that the building and use comply with all of the provisions of this Ordinance applicable to the building or premises or the use in the district in which it is to be located.

b. No change in use shall be made in any building or part thereof, now or hereafter erected, reconstructed or structurally altered without an Improvement Location permit having been issued by the Building Inspector, and no such permit shall be issued to make such change unless it is in conformity with the provisions of this Ordinance.

c. Improvements Location Permits shall be applied for coincidentally with the application for a building permit and shall be issued within ten (10) days after the lawful erection, reconstruction or structural alteration of such building shall have been completed.

d. A record of all Improvement Location Permits shall be kept on file in the office of the Building Inspector and copies shall be furnished upon the request to any person having a proprietary or tenancy interest in the building or land affected. A fee of one dollar (\$1.00) shall be charged for each original permit and fifty cents (50¢) for each copy thereof.

e. No permit shall be issued for excavation for or the erection, reconstruction or structural alteration of any building, before application has been made for an Improvement Location Permit.

ARTICLE X. SUPPLEMENTAL ORDINANCE.

SECTION 1. AMENDMENTS. The Common Council may, from time to time amend, supplement or change the regulations and districts fixed by this Ordinance, in the manner prescribed in Section 63 and 64 of Chapter 174 of the Acts of the Indiana General Assembly of 1947.

ARTICLE XI PENALTIES AND REMEDIES.

SECTION 1. PENALTIES. Any person or corporation who shall violate any of the provisions of this ordinance or fail to comply therewith or with any of the requirements thereof, or shall build, reconstruct or structurally alter any building in violation of any detailed statement or plan submitted and approved therunder shall for each and every violation or noncompliance, be guilty of a misdemeanor and, upon conviction, shall be fined not less than ten (10.00) dollars and not more than three hundred (\$300.00) dollars, and each day that such violation or noncompliance shall be permitted to exist shall constitute a separate offense.

SECTION 2. **REMEDIES.** The City Plan Commission, the Board of Zoning Appeals, the Building Inspector, or any designated enforcement official, or any person or persons, firm or corporation, jointly or severally aggrieved, may institute a suit for injunction in the Circuit Court of Wabash County to restrain an individual or a governmental unit from violating the provisions of this ordinance. The City Plan Commission or the Board of Zoning Appeals may also institute a suit for mandatory injunction directing an individual, a corporation or governmental unit to remove a structure erected in violation of the provisions of this ordinance.

Any building, erected, raised, or converted, or land or premisses used in violation of any provisions of this ordinance or the requirements thereof, is hereby declared to be a common nuisance and as such may be abated in such manner as nuisances are now or may hereafter be abated under existing law.

ARTICLE XII. VALIDITY.

SECTION 1. INVALIDITY OF PORTIONS. Should any Article, Section or Provision of this ordinance be declared, by a court of competent jurisdiction, to be valid, such decision shall not affect the validity of the ordinance as a whole, or any portion thereof, other than the portion so declared to be invalid.

SECTION 2. WHEN EFFECTIVE. This ordinance shall be in full effect from and after its passage, approval and publication according to law.

Passed by the Common Council, this 26th day of June, 1950

Edward Timmons

Mayor and Presiding Officer

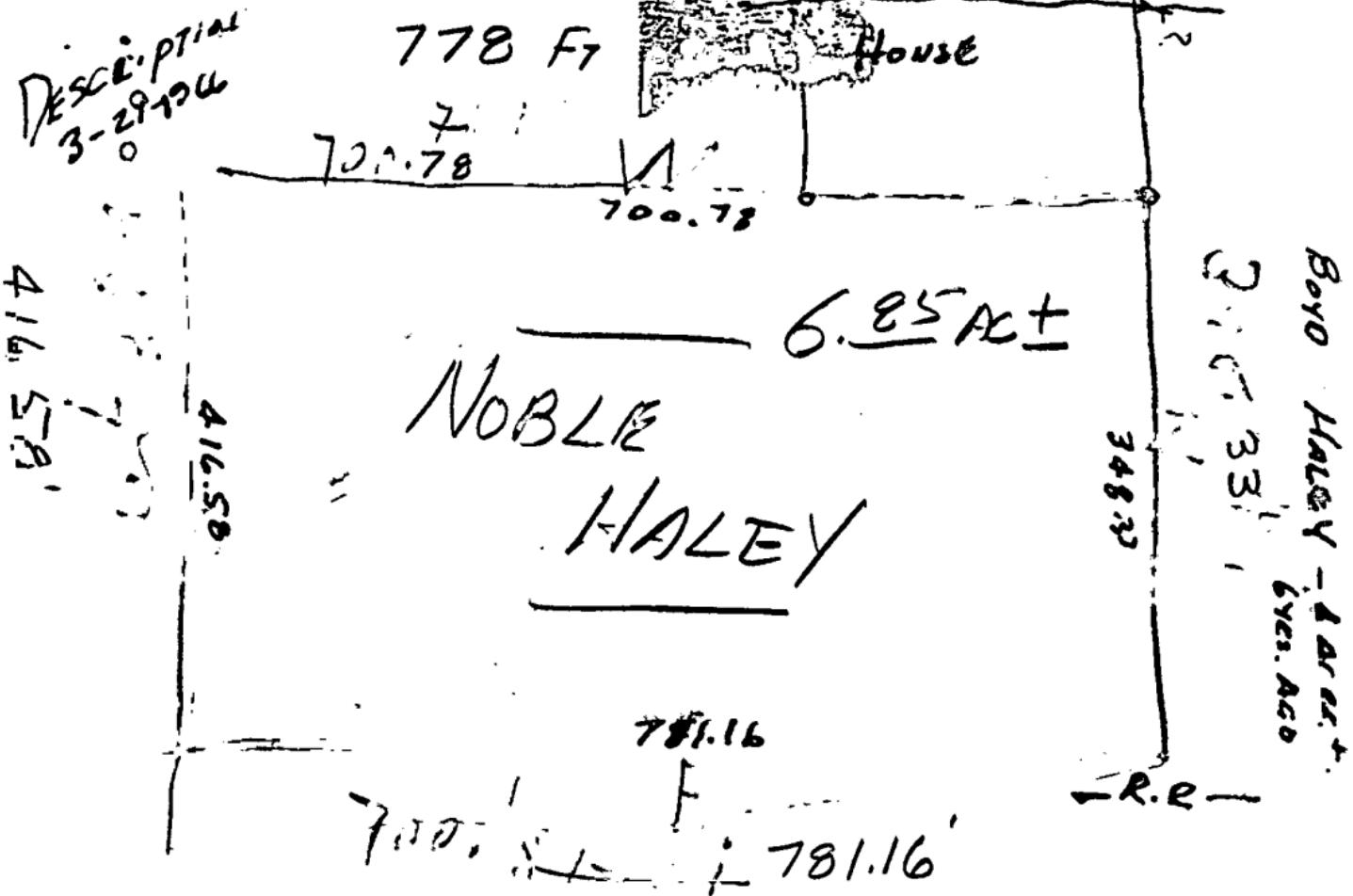
Approved this 26th day of June, 1950

Edward Timmons

Mayor

Attest: Mary Burwell

Clerk-Treasurer



37-63
21-45
68-15

A PART OF THE ~~SW 1/4~~, + A PT OF THE SE 1/4 - SW 1/4
ALL IN SECTION 14-T7N-R1W-114 MONROE COUNTY, INDIANA
BEGINNING AT A POINT THAT IS 1426.66 FT. WEST
OF THE SE CORNER OF THE SW 1/4 OR SE 1/4; THENCE
RUNNING WEST FOR 295 FT, + TO THE EAST R/W LINE
OF THE BLOOMINGTON-FAIRFAX ROAD; THENCE RUNNING
NORTH 21°45' WEST OVER & ALONG THE SAID EAST R/W LINE
FOR 269.8 FT, THENCE LEAVING THE SAID EAST R/W LINE OF THE
SAID BLOOMINGTON-FAIRFAX ROAD AND RUNNING NORTH 67 DEG-
30 MINUTES EAST FOR 360 FT) THENCE RUNNING SOUTH-7°07'
EAST FOR 396.04 FT, + TO THE PLACE OF BEGINNING.
CONTAINING IN ALL 2.50 ACRES, MORE OR LESS.

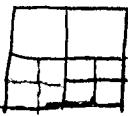
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* CAPTION - SAME AS ABOVE! -

BEGINNING AT A POINT THAT IS 401.66 FT. WEST + 250.77 FT
NORTH OF THE SE CORNER OF THE SAID SE 1/4 OR SW 1/4, +
SAID SEC. 14. THENCE RUNNING N-21-45 W over + along
the said R/W line for 50ft, Thence leaving the said
east R/W of the BL-FX RD + running N-67-30 E for 400 ft;
then running S-7-07'E for 50ft, then running
South 67-20'W for 360 ft + to the place of beginning.
Containing in all 0.44 acres ±



A PART OF THE SOUTH HALF OF SEC. 14 - T7N; R1W - IN MONROE
COUNTY, INDIANA

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 & \underline{\underline{400}}
 \end{array}$$

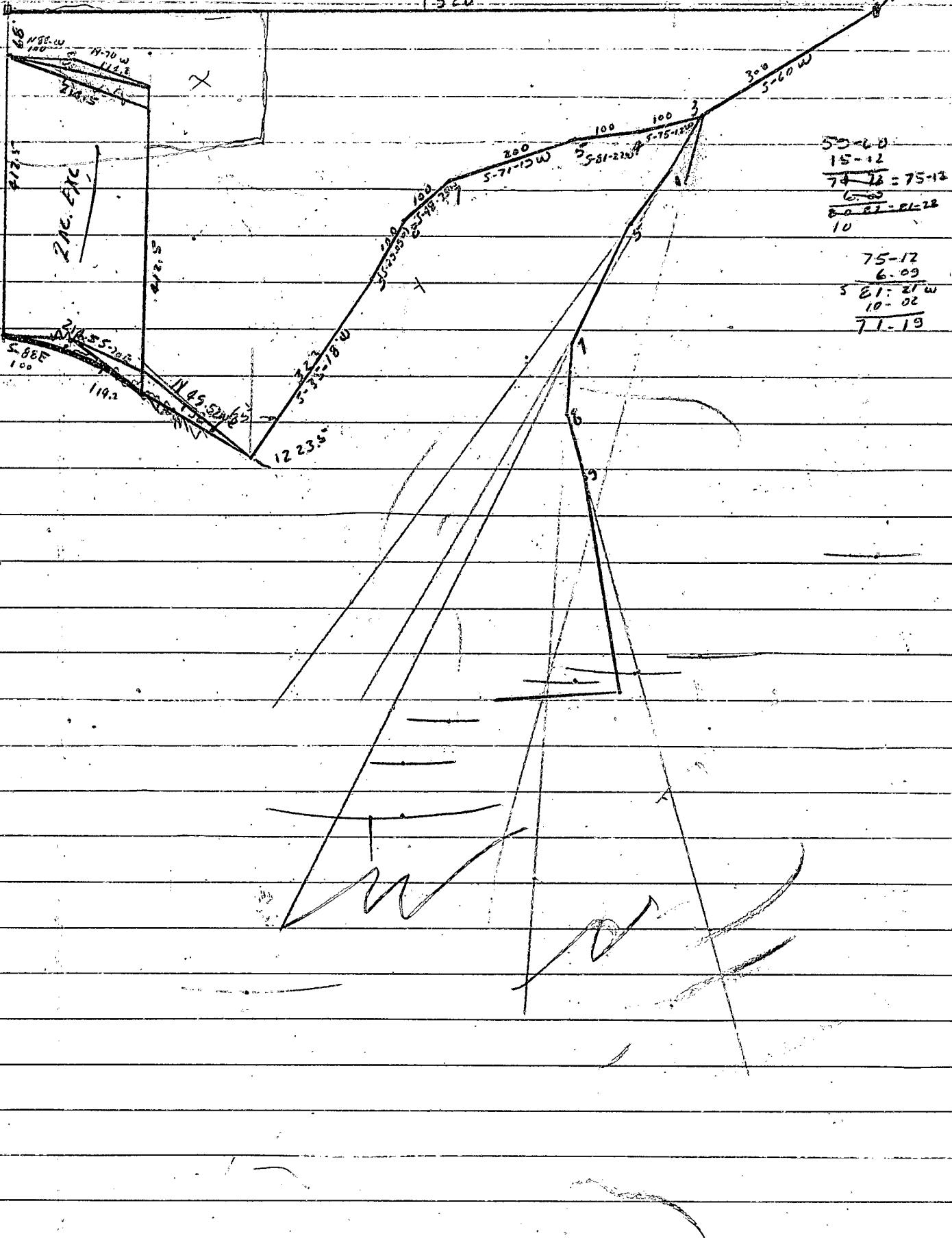
$$\begin{array}{r}
 1426.51 \\
 -0087 \\
 \hline
 598557
 \end{array}$$

$$\begin{array}{r}
 1141208 \\
 -12,410637 \\
 \hline
 \end{array}$$

Stone

-1320

4

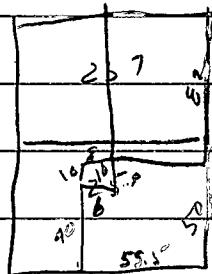


$\frac{1}{2} \cdot \frac{3}{2} \cdot \frac{5}{2}$

82
55
132

BOOK - 144 - Page 156

Beg at NE COR. of LOT 257 said cor. being at INTER.
of the 50' line of 7TH ST. & the west line of Wash. ST.
SG. on the East line of lot 257 & said lot 258 for 82' -
west on a line parallel with the N. line of lot 257
for 53 $\frac{1}{2}$ ' - North on a line parallel with the EAST line
of said lot 257 & 258 to North line of lot 257 - East
on North line to Beg.



53.50

$\frac{16+16}{63.66}$

Beg at the said NE cor. of lot 257 - East on on
extension of the North line of lot 257 for 16' 8" -
South parallel to East line of lot 257 & 258 for 82'
West parallel to the extension of the North line of lot 257
16' 2" to the East line of lot 257 & 258 - North along
the East line of 257 & 258 for 82' & to Beg. said Real
estate being formerly a part of Wash. ST. vacated

3-8-57

5-21-62

123-205

BEG. @ the S.E. COR 258 - WEST 59.5 FT, NORTH
40 FT, EAST 10 FT; NORTH 10 FT; - EAST 53.5 FT;
SOUTH 50 FT; TO BEG.

✓

BEG. 59 $\frac{1}{2}$ FT. WEST OF S.E. COR; NORTH 10 FT; WEST
8 FT; ± TO A STONE WALL ALONG THE EAST LINE
OF A STONE WALL ALONG THE S. OF A DRIVE-
WAY; SOUTH ALONG THE SAID STONE WALL FOR 50 FT
TO AN ALLEY; EAST 5 $\frac{1}{2}$ FT. ± TO PLACE OF BEG

✓

Clear Creek Dr. ↘

Strain

Lashon
1 2 3
2 1 2 47.5
2 4

.06/

247-5

Chestnut

247-5

Cartwright

247-5

Yugan

247-5

Larry Chestnut

247-5

247-5

Record

no collage

247-3
Fleck

247-3

Fleck

1093.10' North

247-5

Maham

873.10 North

247-5

Johnson



697.10 14-10 Wayside Dr

↑ 697.10 North
247-5

H. Lemberg

521.10 N 247-5

Wilkerson

247.50

17-105
3.29.65
11

TRACT A1

A PART OF THE NW $\frac{1}{4}$ OF THE SW $\frac{1}{4}$ OR SECTION
3-TEN RIE - 111 Monroe Co., Indiana

BEGINNING AT A POINT THAT IS 366 FT SOUTH
OF THE NW. CORNER OF THE SAID $\frac{1}{4}$ - $\frac{1}{4}$; THENCE
S-11-40'EAST FOR 165 FT; THENCE RUNNING EAST FOR
350 FT; THENCE RUNNING NORTH 100 121.27 FT; THENCE
RUNNING WEST FOR 363 FT & TO THE POINT OF
BEGINNING. CONTINUING IN ALL ONE (1) ACRE,
MORE OR LESS

HJD JES

TRACT B2

A PART OF THE NW $\frac{1}{4}$ OF THE SW $\frac{1}{4}$ OR SECTION OR
~~SECTION~~ 3-TEN RIE - 111 Monroe Co., Indiana.

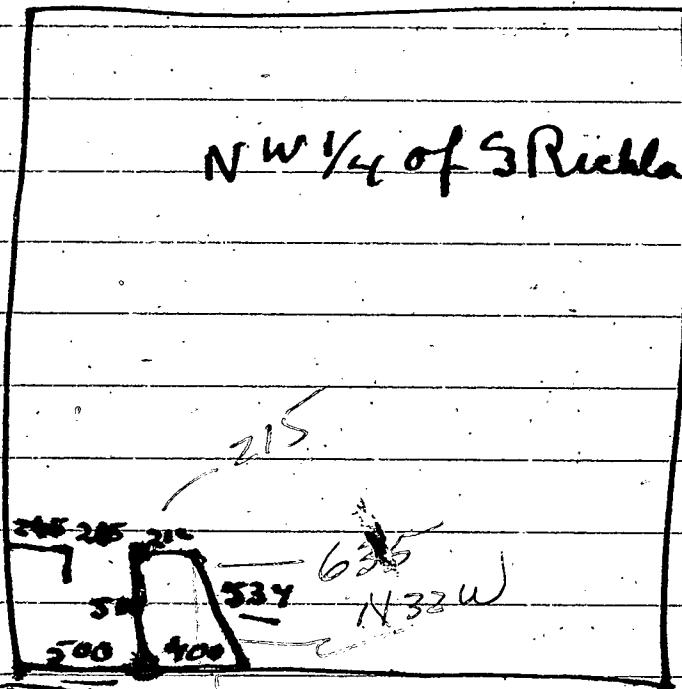
BEGINNING AT A POINT THAT IS 144.76 FT EAST
& 238.84 FT. NORTH OF THE SW. CORNER OF THE SAID
 $\frac{1}{4}$ - $\frac{1}{4}$; THENCE RUNNING N-14-40-U FOR 187 FT; THENCE
RUNNING EAST FOR 250 FT; THENCE RUNNING SOUTH
FOR 180 FT; THENCE RUNNING EAST FOR 216 FT
& TO THE POINT OF BEGINNING. CONTINUING IN
ALL ONE (1) ACRE, MORE OR LESS

JES

McCrea Will Co.

N

NW 1/4 of S Richland



503
215
288
286
2304
2308
576

923 94
2500 00

332 341
56000

500
300
2300 00

Sell

635
631

535

534

534

213

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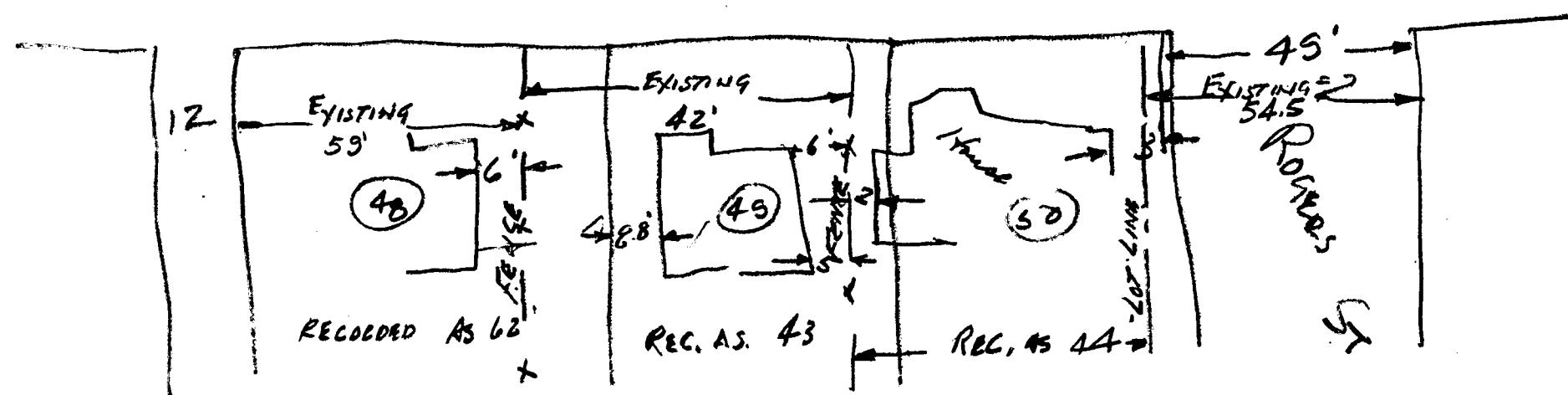
1603

1603

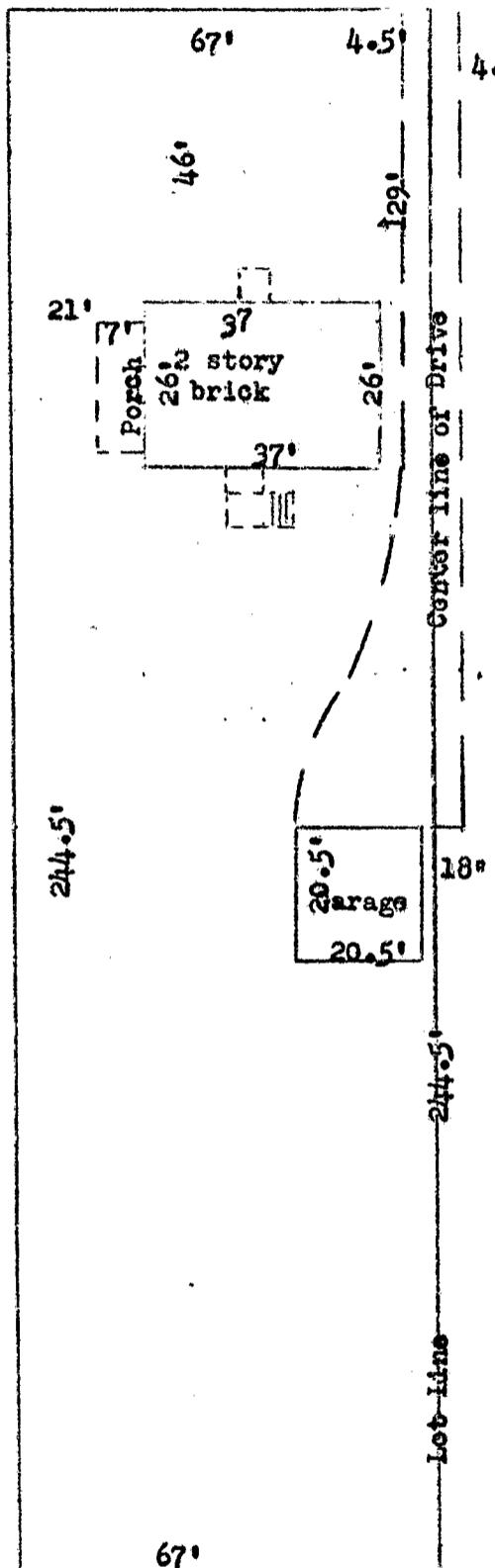
1603

CFE

W 11TH ST



East First Street



September 8, 1948

I, the undersigned, a licensed engineer in the State of Indiana, hereby certify that the plat shown here, is a true and correct plat of that part of Seminary Lot 103 as recorded in Plat Book 95 Page 436.

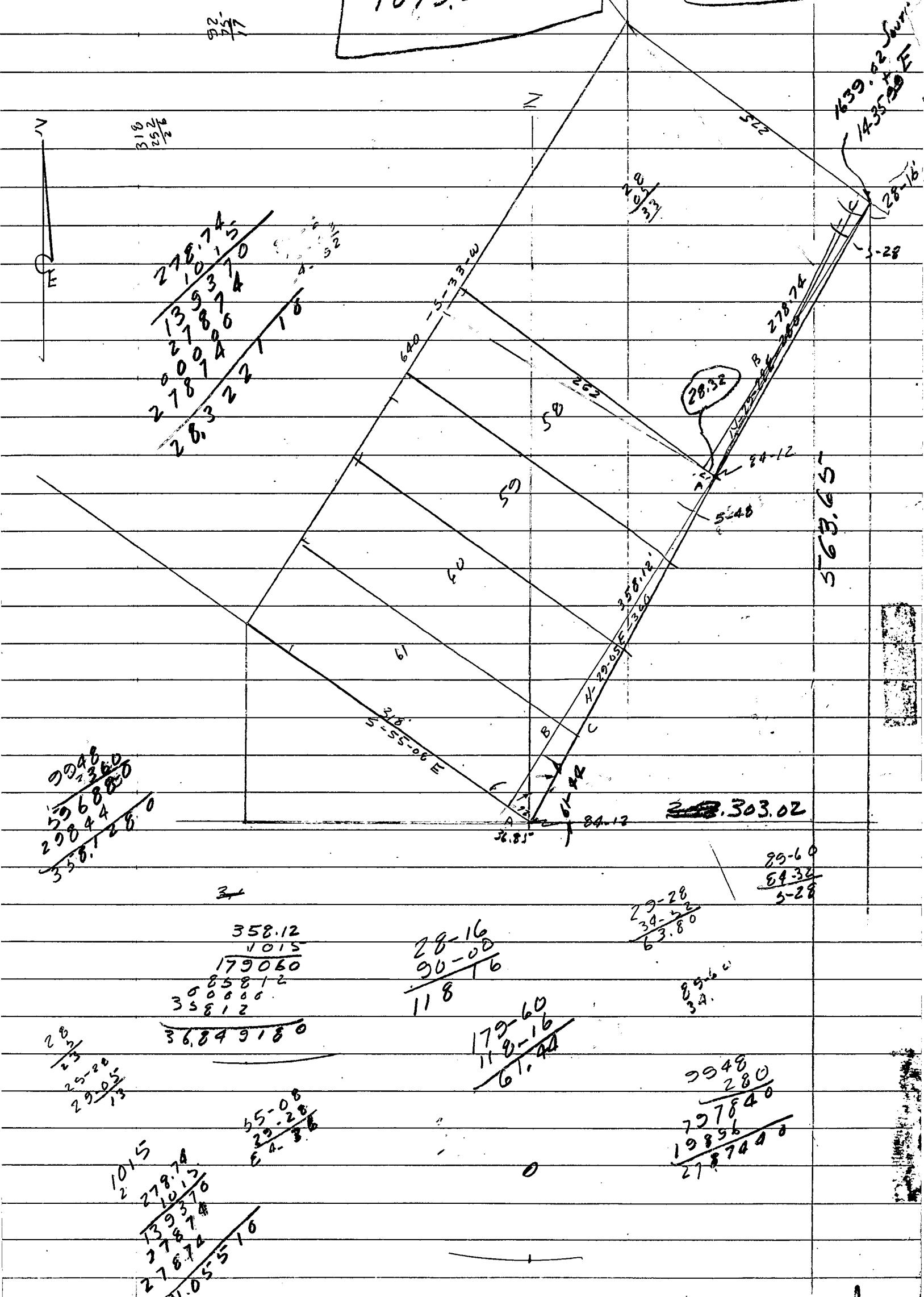
I further certify that the improvements located on the above mentioned real estate are as shown on this plat.

Civil Engineer.

Fees-\$10.00

~~500TH~~

EAST
1135.99
113.83
1132.97A EAST



43-3
 373
 373
 45.12
~~45.12~~
~~42.2.00~~
~~43.73.12~~
~~44.9.12~~
 43-3
 373
 60
 45.12
 109.12

109.12 WEST

2274.5
 180.0 #2
 2 454.50
 68.84
 25 23.34 NORTH

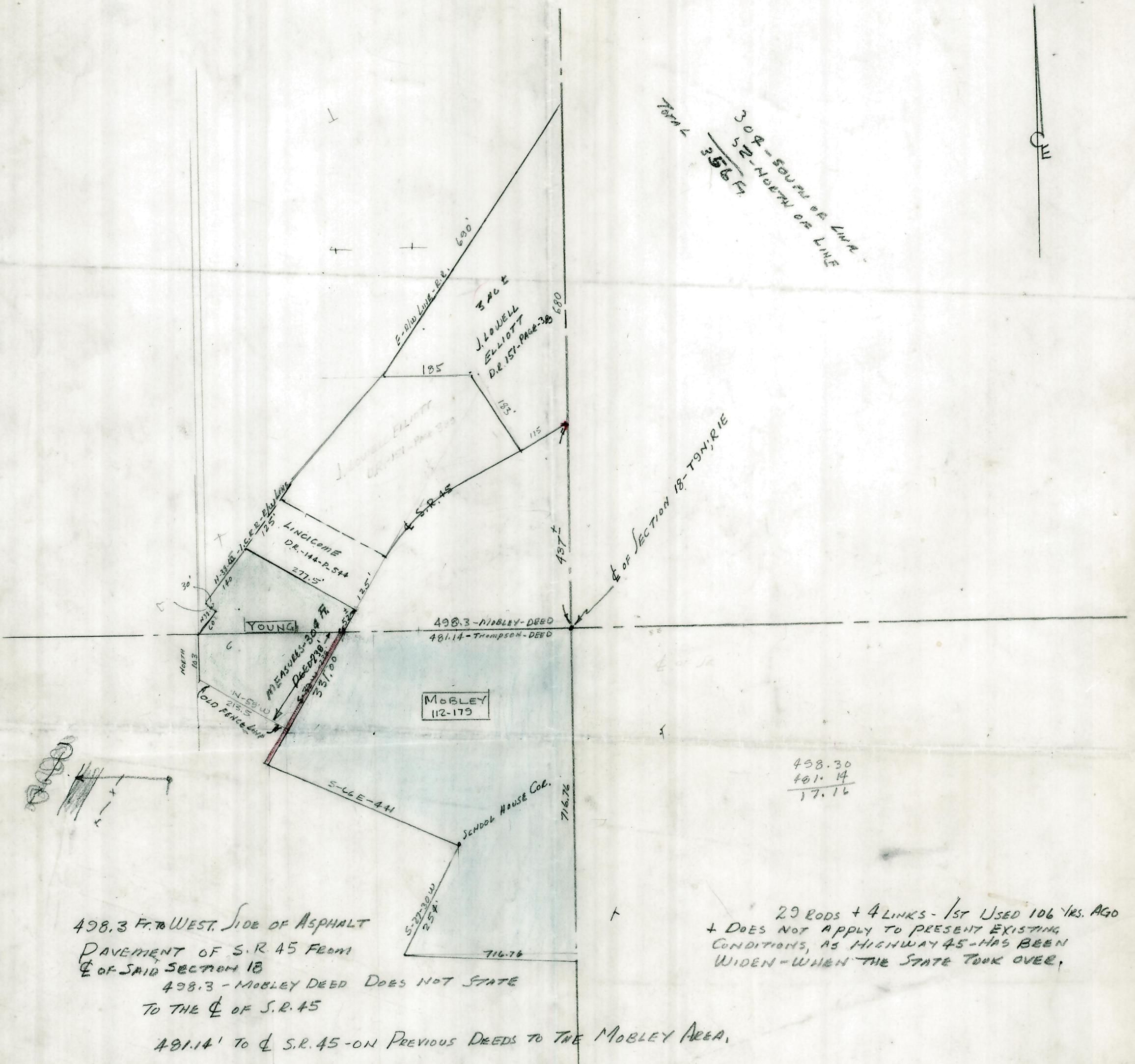
29-66
 35-27
 54-33

1 54-33
 84.5
 107.30
 32.584
 651.68
 68.84370

+

1119
 69
 01
 6401
 62101
 4212
 4





498.3 FT. TO WEST SIDE OF ASPHALT
PAVEMENT OF S.R. 45 FROM
E OF SAID SECTION 18

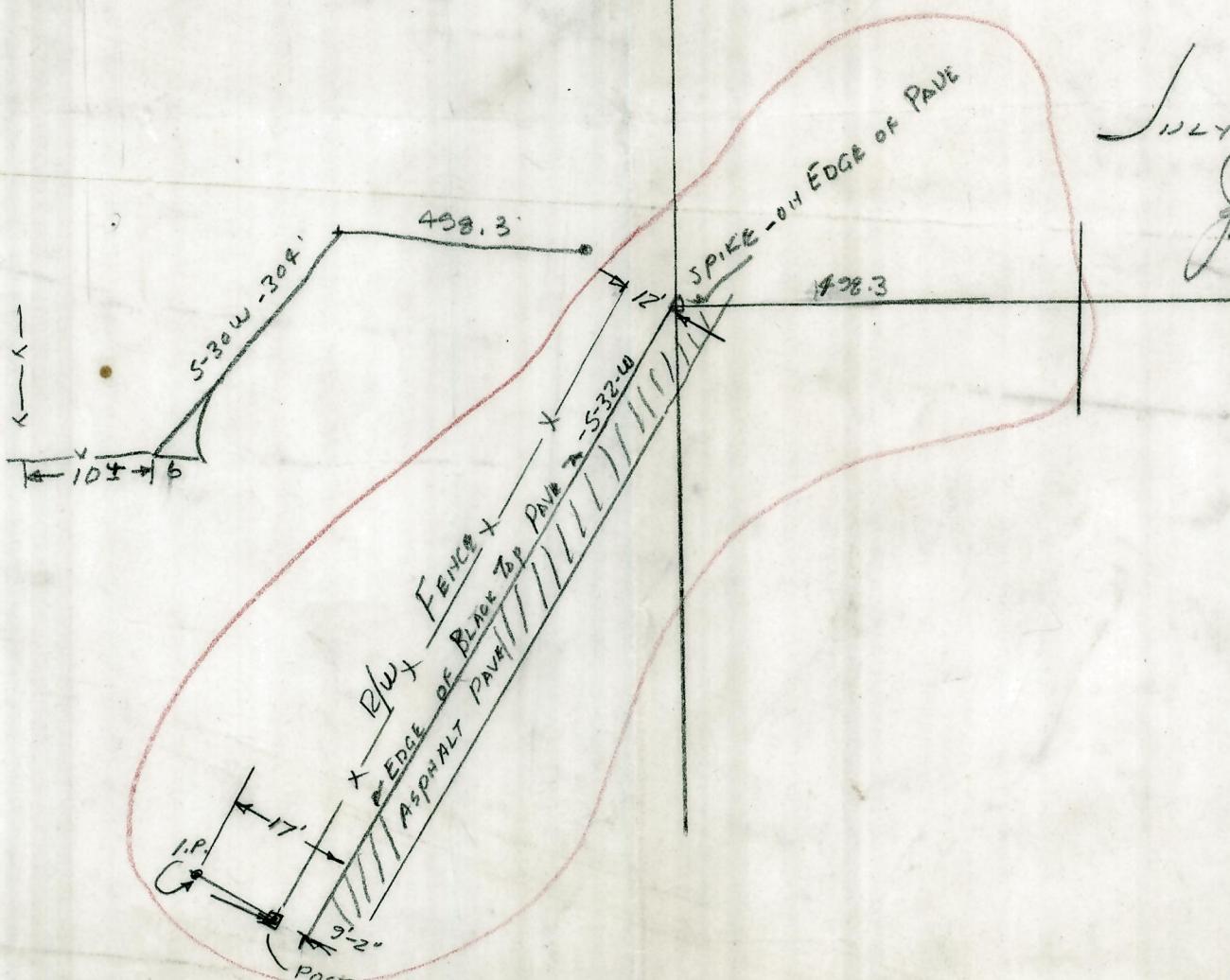


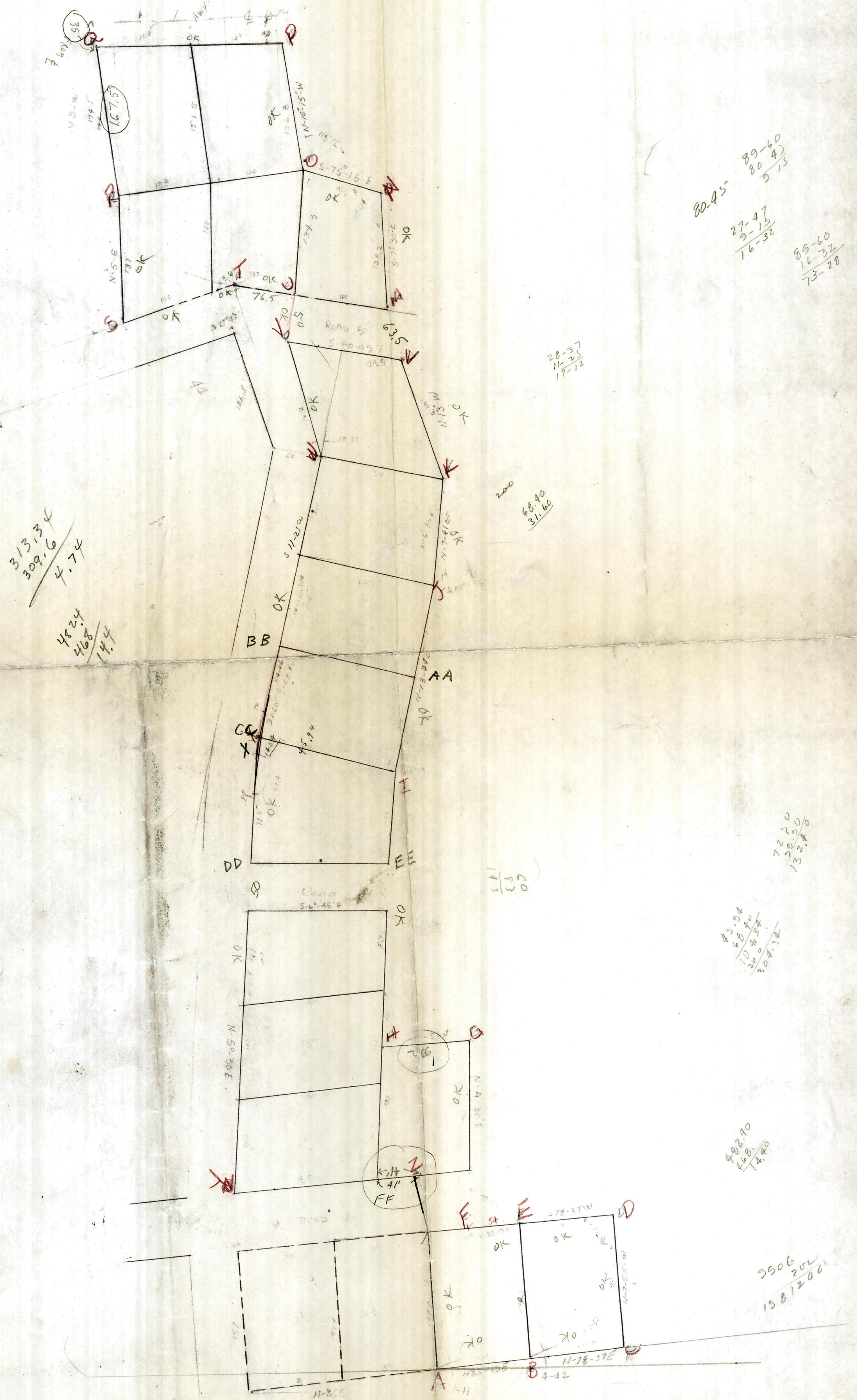
716.76

29 RODS + 4 LINKS - 1ST USED 106 yrs. AGO
+ DOES NOT APPLY TO PRESENT EXISTING
CONDITIONS, AS HIGHWAY 45 - HAS BEEN
WIDEN - WHEN THE STATE TOOK OVER.

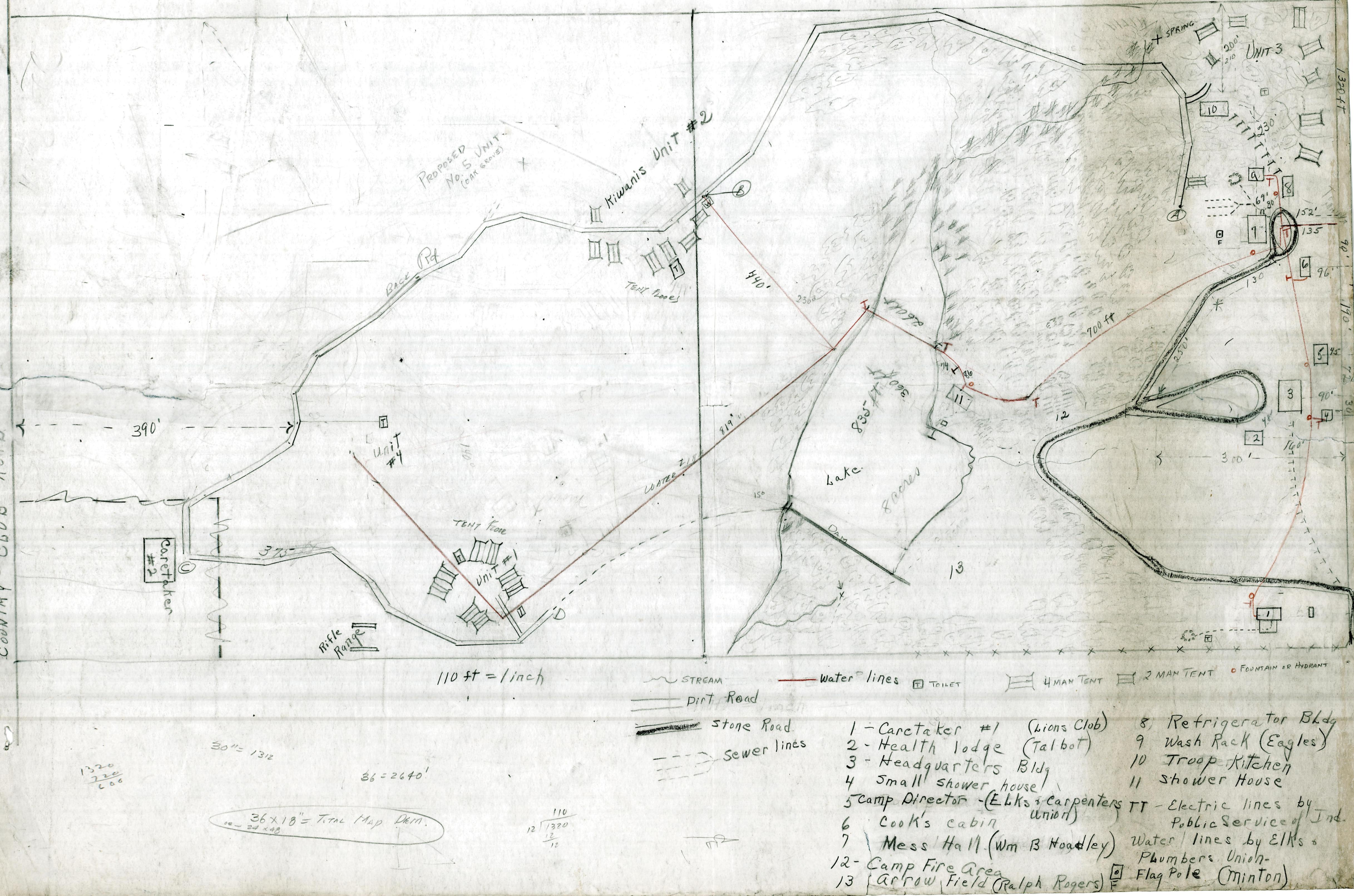
481.14' TO & S.R. 45 - ON PREVIOUS DEEDS TO THE MOBLEY AREA.

$\frac{1}{2}$ = CENTER





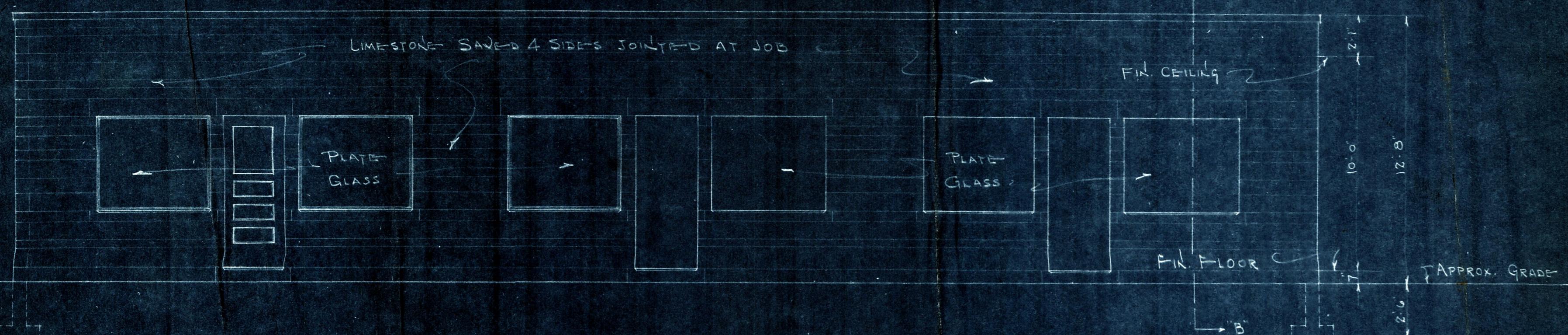
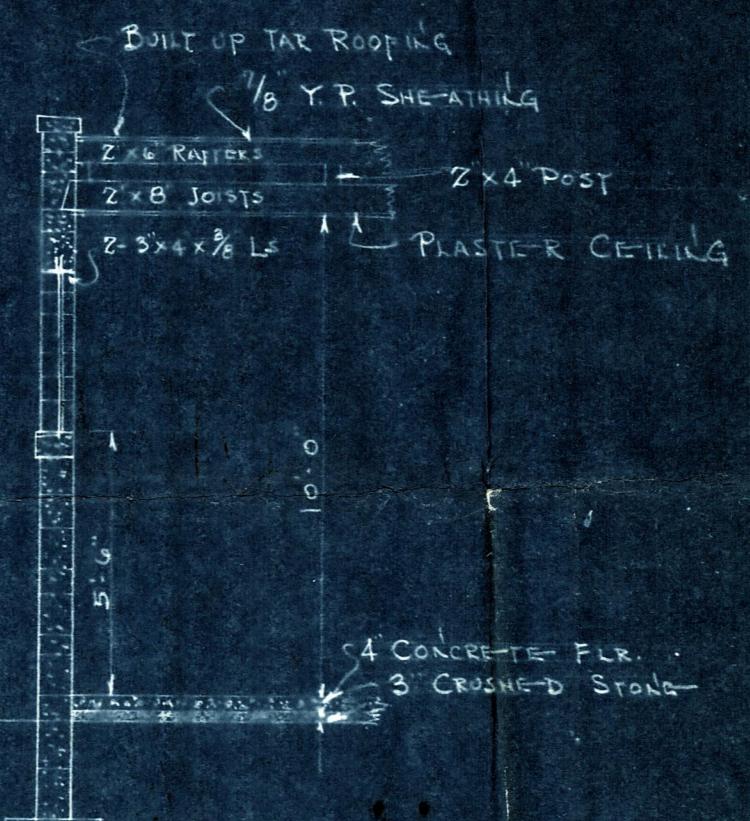
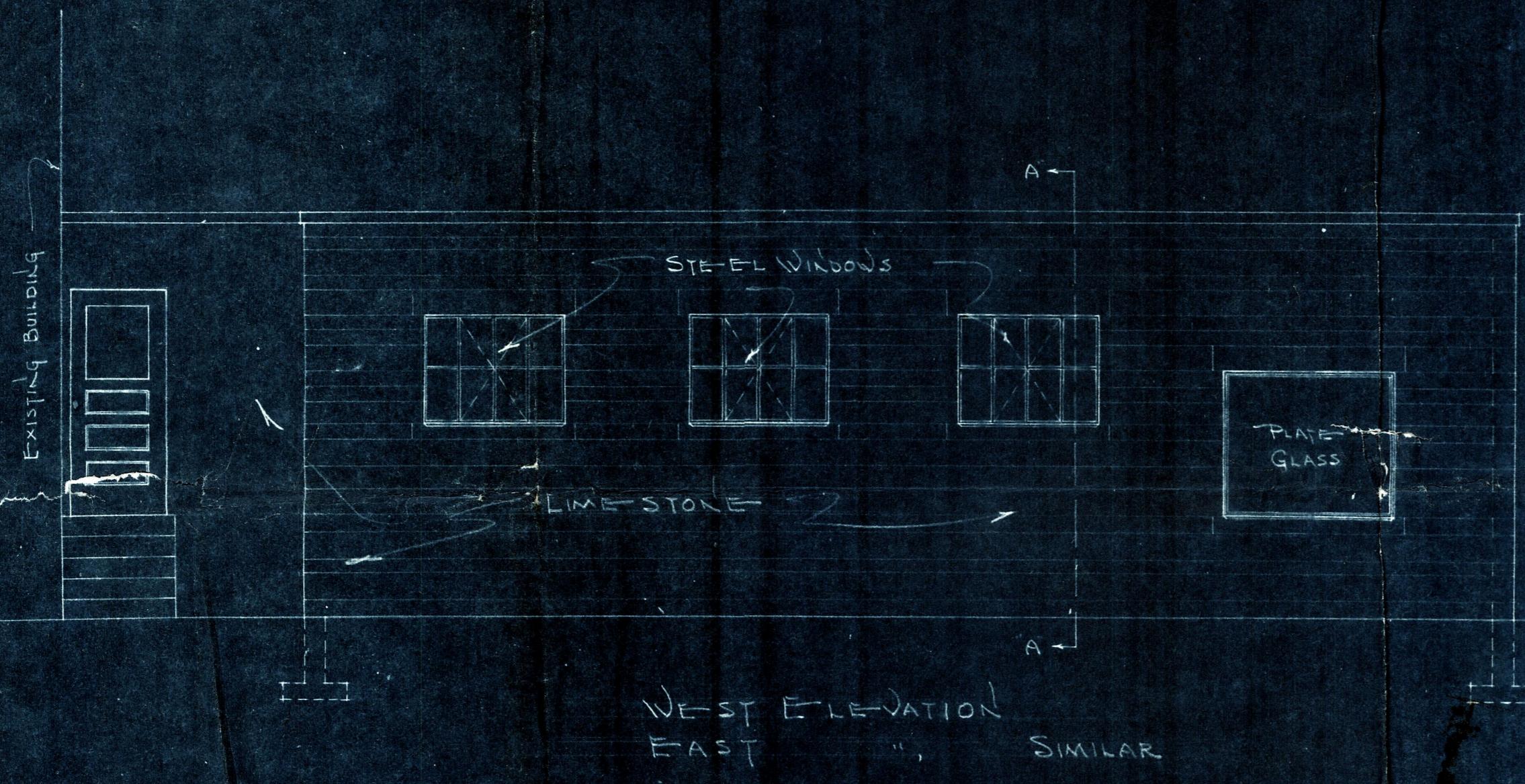
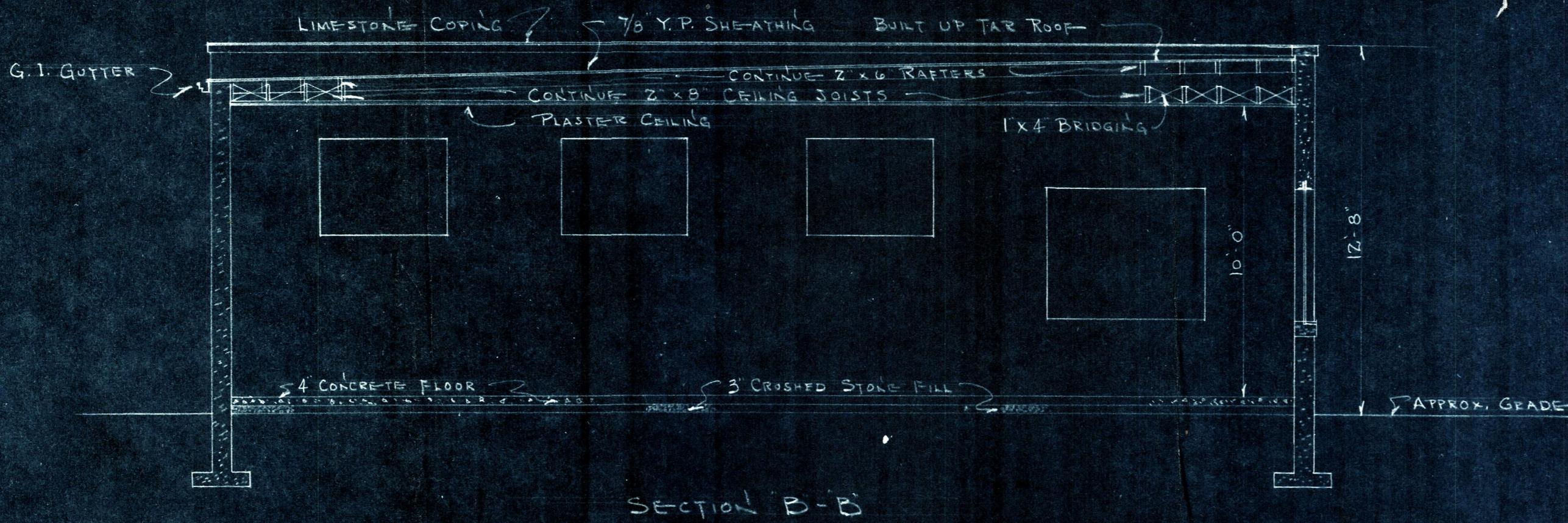
COUNTRY - CLUB ROAD



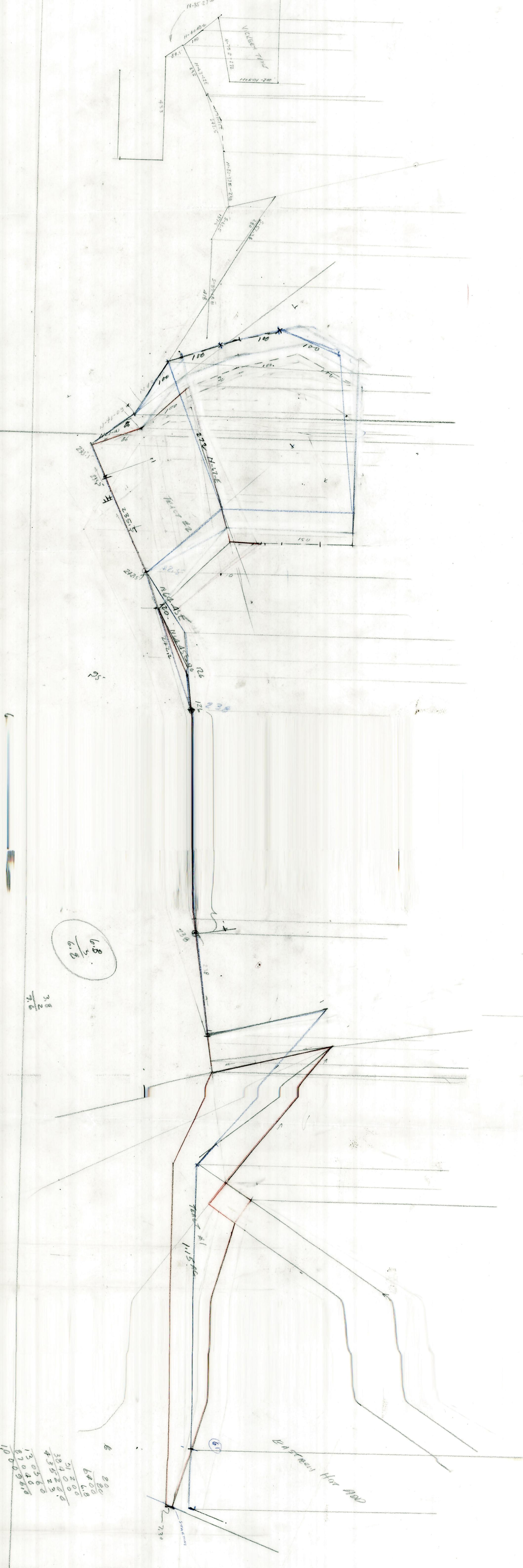
1 - Caretaker #1 (Lions Club)
 2 - Health Lodge (Talbot)
 3 - Headquarters Bldg
 4 - Small shower house
 5 - Camp Director - (Elks & Carpenters Union)
 6 - Cook's cabin
 7 - Mess Hall (Wm B Hadley)
 12 - Camp Fire Area
 13 - Arrow Field (Ralph Rogers)

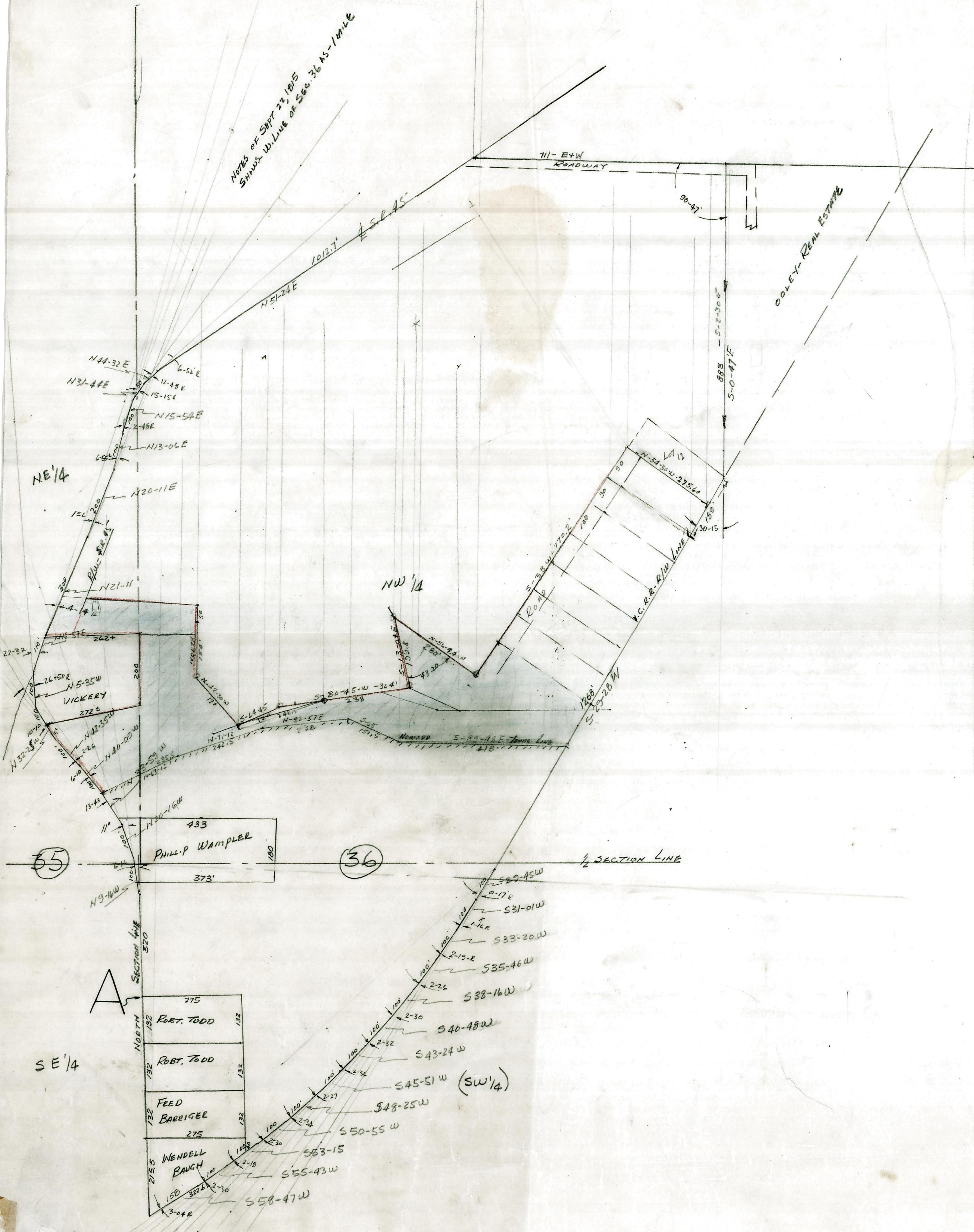
8 - Refrigerator Bldg
 9 - Wash Rack (Eagles)
 10 - Troop Kitchen
 11 - Shower House

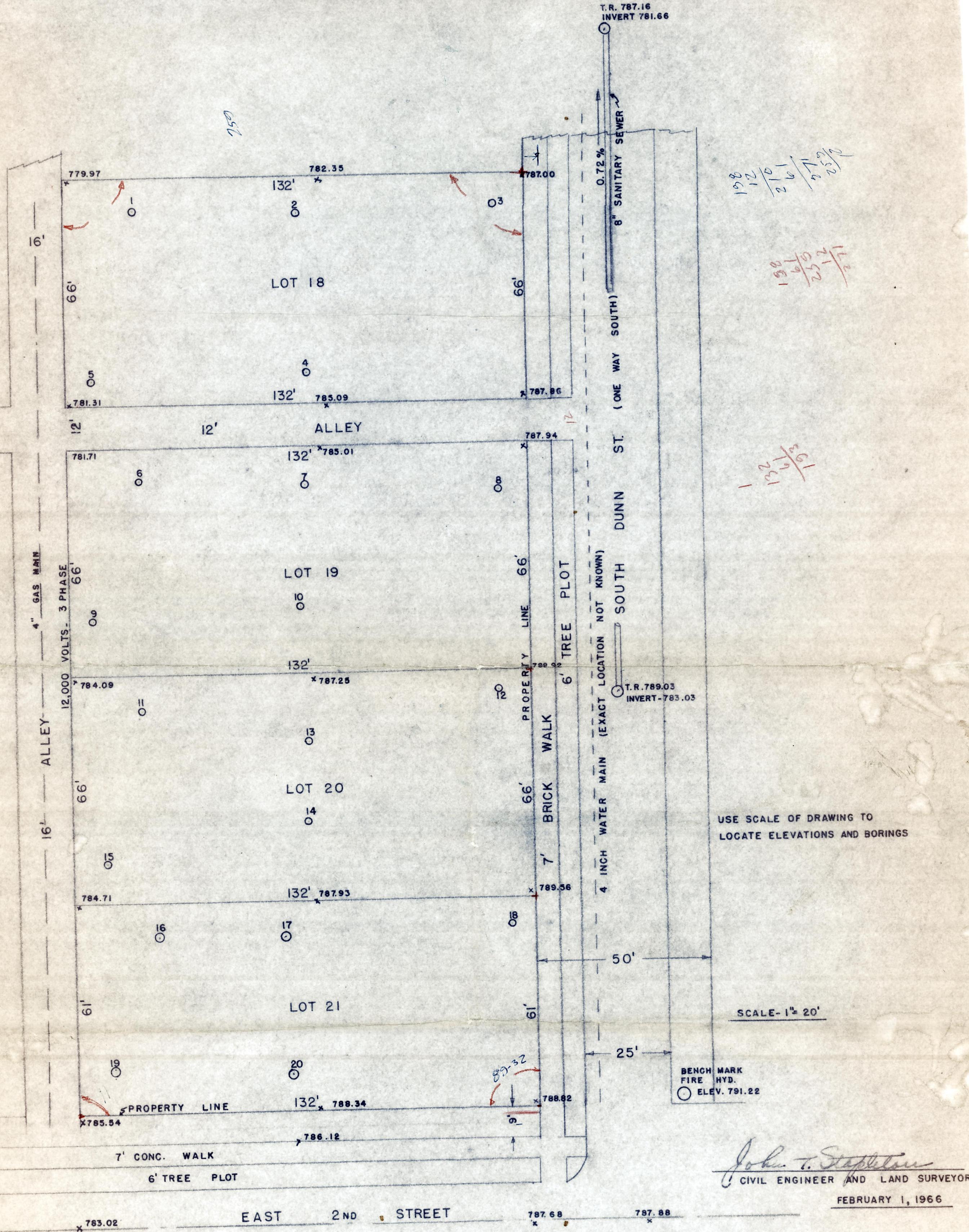
TT - Electric lines by Public Service of Ind.
 Water lines by Elks & Plumbers Union.
 Flag Pole (Minton)



PROPOSED STORE BLDG.
FOR
MR. A.T. HOADLEY
FIFTH AND GRANT STS.
BLOOMINGTON, INDIANA







GELMAN CONSTRUCTION CO. 2ND. AND DUNN ST. SURVEY
BLOOMINGTON, INDIANA



OMICRON PI
ALPHA PT. LOT 122 DOD
D.H.V. PARK ADD

TUESDAYS			
VAN ORMAN GRAHAM HOTEL			

Alden's 32	Dept Store 19	2	SIXTH ST.
Wick's Dept 33	Store 19	3	
Lemon 29	Furniture 29	4	
BLOOMINGTON PAINT & WALLPAPER 66		5	
REEVES FURNITURE STORE 22		6	
NEUMOKE GIFT Shop. 40		7	
GIFT & CARD STORE 22		8	

21	21	22	22
SPORTING GOODS			

WOOLWORTH 5+10			
J.C. PENN			
M.A. COOPER	20		
KRESGE 25 TO 1.00	43		
EAGLE CLOTHING	24.5		
Hook's DRUGS	23.5		
KRESGE 5+10	42		

COLLEGE AVE

COURT HOUSE			
FIFTH ST.			

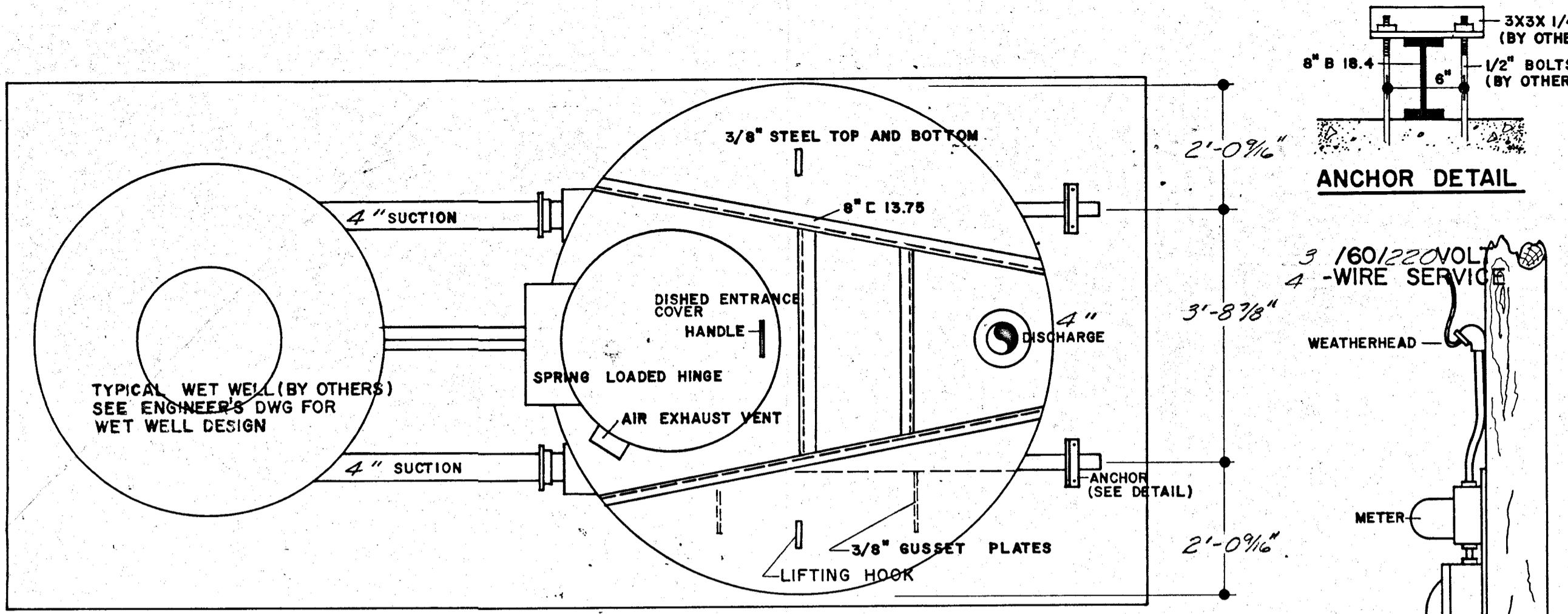
GENERAL (ROBBES) ELECTRIC Co.			
R+S SHOE STORE			
VOGUE READY TO WEAR (LADIES)	22		
WYLIE FURNITURE Co.	22		
REXALL DRUGS Lodge	22		
WILLIAMS JEWELRY	22		

WILES DRUG Co. (FRANCIS) LOUBEN LADIES READY TO WEAR			
ULLOM MEN'S CLOTHING	18		
SMITH'S SHOES	22		
DANDALE RESTAURANT	22		
MONROE Co. BANK	22		

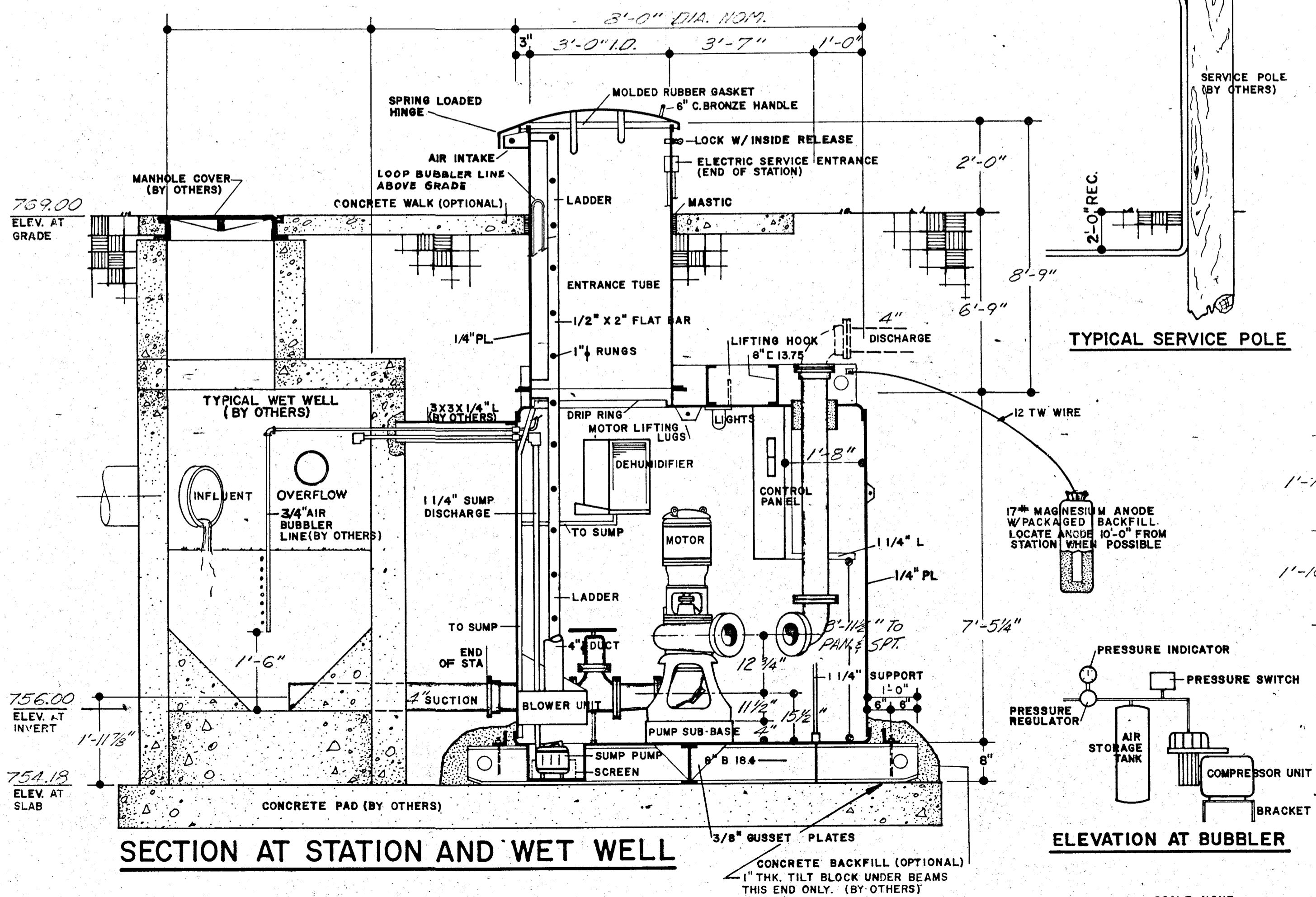
CITIZENS BANK			
Albert Hausey			

First National Bank	44.5	41.5	41.8
SCHIFF SHOE Co.			
WALGREEN DRUG Co.			
KAHN CLOTHING 50 MEN CITIZEN BANK			
Value-U. Dress Shop & (PAINT, MATTRESS) MUSIC STORE	16	20	21
MEERIT SHOE Co.			
Brownstone House	12		
Diana Shop			
TROY SHOES	24		

3-SERIES CLOTHING			
STOGSDILL			



TOP VIEW OF STATION AND WET WELL



SECTION AT STATION AND WET WELL

EL E V A T I O N A T B U B B L E R

PLAN OF STATION

CAPACITY 125 GPM AT 45' TPH

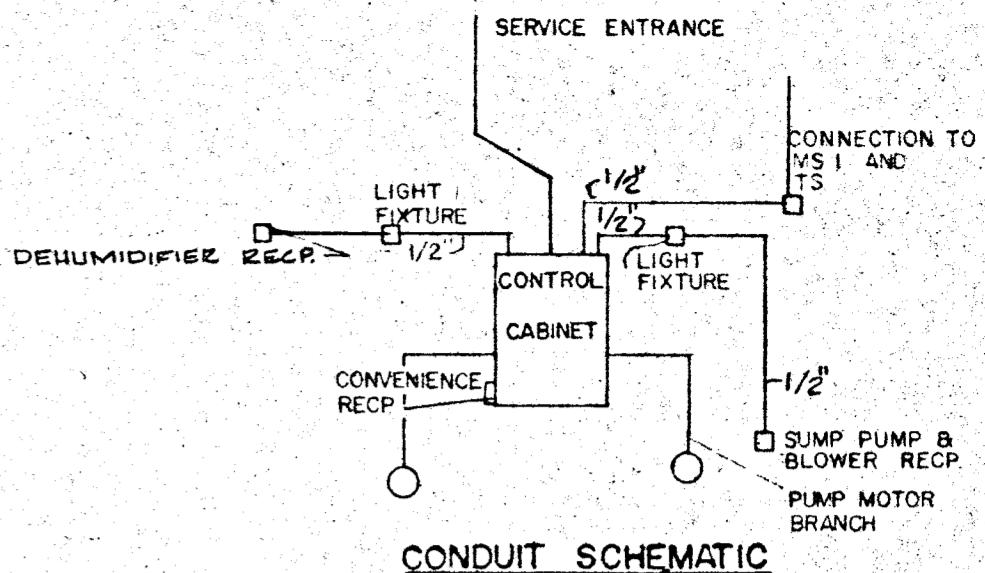
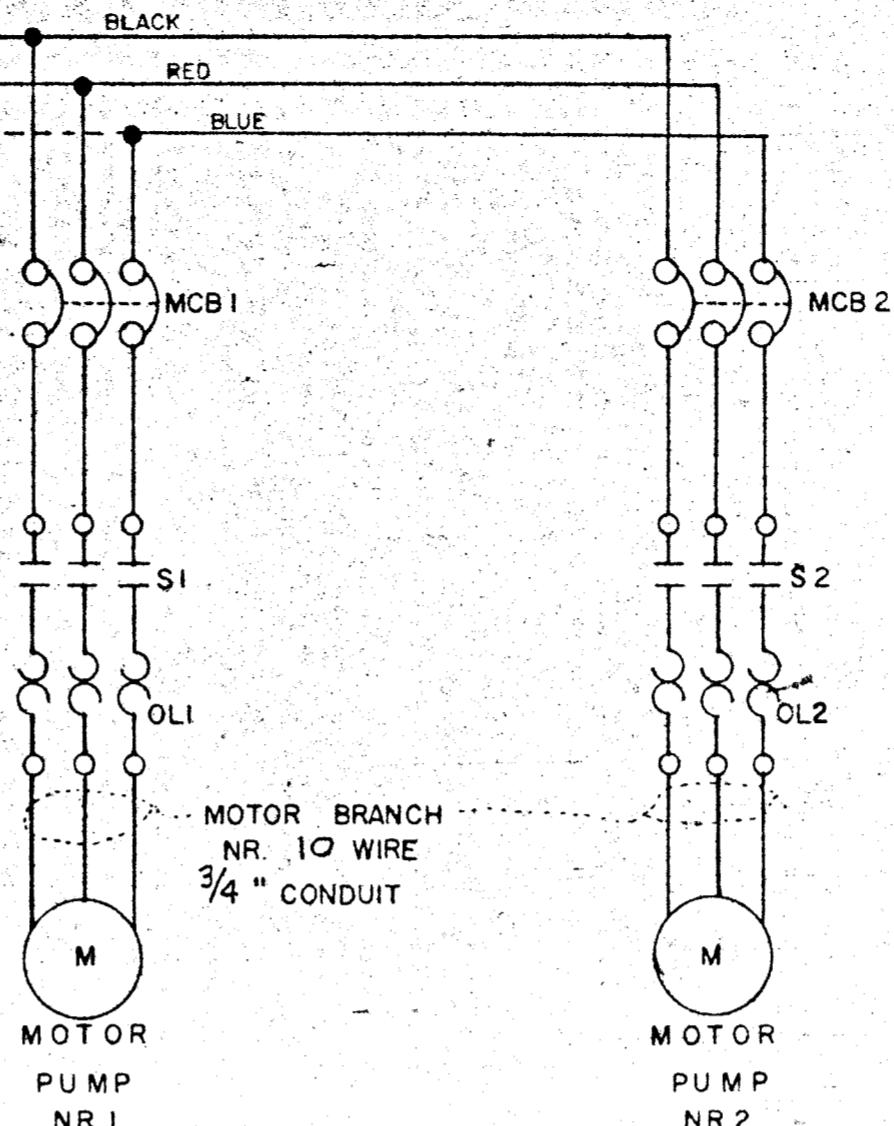
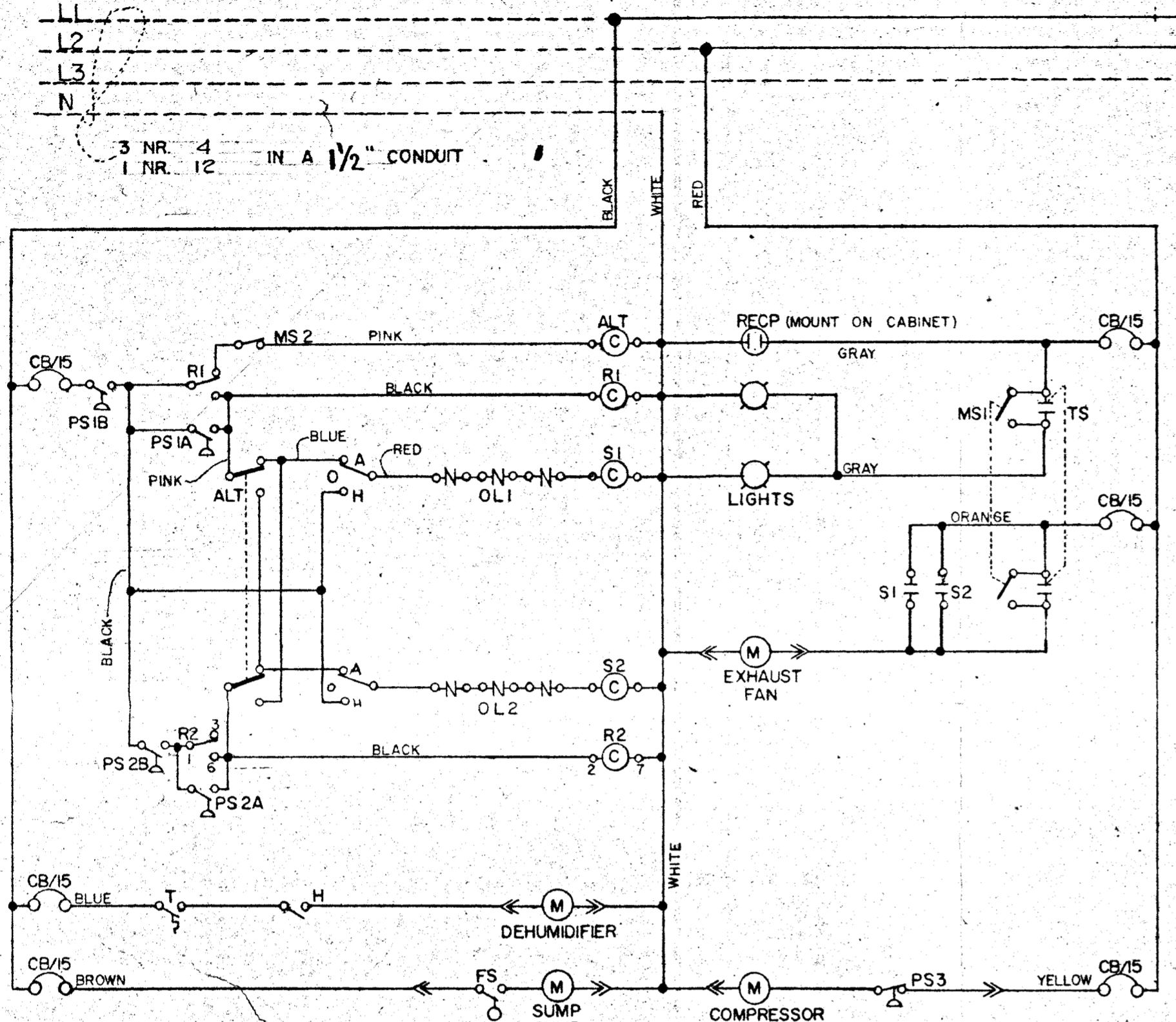
PACKAGED PUMP STATION
at
BLOOMINGTON, INDIANA

TEX-VIT
MANUFACTURING COMPANY
MINERAL WELLS, TEXAS

PACKAGED PUMP STATION
at
BLOOMINGTON, INDIANA

SUITABLE FOR 3/60/120-208Y
OR 3/60/120-240Δ, 4-WIRE SYSTEMS

NOTE:
THE "HIGH" OR "WILD" LEG MUST BE CONNECTED
TO L3 (BLUE)



REQ'D	ITEM	LEG.
BILL OF MATERIALS		
CAN-TEX TEX-VIT MANUFACTURING DIVISION MINERAL WELLS, TEXAS		
B	TS & MSI WERE CONNECTED W/RECEPTACLE	5/16/66
A	DEH. RECP. WAS ON OPP SIDE	1213M66
	ELEC SVC CONDUIT WAS 1 1/2"	
NR.	DESCRIPTION	INIT DATE
	REVISONS	CODE FILE NR.
		APPROVED
		MASTER DWG NR.
		DWG. NR.
WIRING SCHEMATIC DUPLEX PUMPING STATION H.P. 7/8 RPM 1150-1750		
PS-40487-C		

ALL 125 V. RECEPTACLE TO BE THREE-WIRE GROUNDING TYPE

NOTES

NR.	DESCRIPTION	INIT DATE	CODE FILE NR.	DATE	MASTER DWG NR.	DWG. NR.
	REVISONS	I-A-0		DEC. 6, 1965	M-1	

REV. B

MAPLE HILL ROAD BY **DATE**

PLAN SURVEYED _____
PLOTTED _____
NOTE BOOK ALIGNMENT CHECKED _____
NO. 100 RT. OF NAV. CHECKED _____

PROFILE SURVEYED _____
PLOTTED _____
GRADE CHECKED _____
NOTE BOOK NO. 100
STRUCTURE MAPPING CHD.

BY _____ DATE _____

PLATE 2-PLAN-PROFILE G.P.R. & R.E. STANDARD

100# RAD PAPER-MADE AND PRINTED IN U.S.A.
EUGENE DIETZEN CO.

AU DUBON ROAD

